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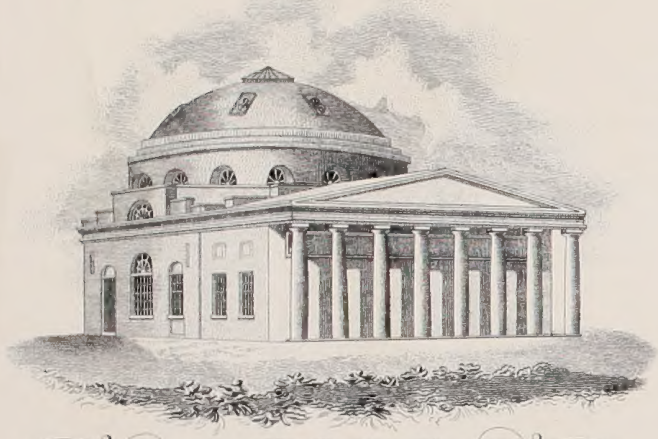

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University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were Richard J. Behles, Historical Librarian/Preservation Officer; María Milagros Pinkas, Metadata Management Librarian; Angela Cochrane and Carol Harling-Henry, Resources Division; Sarah Hovde, Abra Schnur and Megan Wolff, Services Division.

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UNIVERSITY OF MARYLAND

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Parshall, J. Worthington	The Mechanism of Hearing	1887	
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Stokes, Whitefoord S.	Acute Tubular Nephritis	1887	

[1] Title page behind thesis.

[2] ~~Title page on the back of thesis.~~

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1851-1892; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

Author	Title	Year	Notes
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Zepp, James A.	Acute Lobar Pneumonia	1887	

[3] Small, bound librarian's note stating that student did not graduate.
[4] Title page behind thesis.
[5] Small, bound librarian's note stating that student did not graduate.
[6] Title page on the back of thesis.

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Author	Title	Year	Notes
McComas, Henry W.	Typhoid Fever	1888	(noteworthy calligraphy on title page)
Morrow, Charles W.	Typhoid Fever	1888	
Slaymaker, Edmund W.	Acute Pneumonia	1888	
Smith, Benjamin M.	The Physician or Practice of Medicine	1888	(no title page)
Truitt, George W.	Pleuritis	1889	

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UNIVERSITY OF MARYLAND

SCHOOL OF MEDICINE

THESES

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Offutt, J. Samuel	Pleuritis	43p.
Parker, John B.	Antiseptic Surgery	20p.
Parshall, J. ~~W.~~ Worthington	The Mechanism of Hearing	20p.
Pemberton, W. D.	Report of Cases	38p.
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Poole, J. S.	Diphtheria	28p.
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Stotesbury, C. A.	Diarrhoea	19p.
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Taggart, Charles C.	Lobar Pneumonia	23p.
Talbot, Henry T.	Aqua-water	29p.
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Welsh, Emmet A.	The Country Doctor	18p.
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Wissler, W, F.	Gonorrhoea	15p.
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Young, George B.	Acute Rheumatism	25p.
Zepp, James A.	Acute Lobar Pneumonia	32p.

1888

McComas, Henry W.	Typhoid Fever[1]	25p.
Morrow, ~~Henry~~ Charles W.	Typhoid Fever	25p.
Slaymaker, ~~E.~~ Edmund W.	Acute Pneumonia	26p.
Smith, ~~B.~~ Benjamin M.	The Physician or Practice of Medicine	24p.

1889

Truitt, George W.	Pleuritis	27p.

[1] Noteworthy title page calligraphy

Thesis.

Pleurites.

By

Samuel Offutt,

University of Maryland

Baltimore

Md.

Session of 1886-87.

Pleuritis.

[illegible] ple-[illegible] Pleu-risy was used to express pain in the side from what[illegible] cause it might have been produced, provided it was acute in character and acc-[illegible] inflammation, without [illegible] what particular tissue was laboring under the inflammation. [illegible] ved [illegible] disease.

By the term pleurisy is meant inflam-[illegible] of the thorax, and [illegible] inflammation of which [illegible]

in other portions of the body.- viz:- adhesions the pouring out of serum, of coagulable lymph of blood, or of pus; one or the other of these results being regulated by the intensity of the inflammatory process, its rapidity and duration; of the above results that of adhesion [illegible] pre-existing inflammation: the frequency with which we meet with this morbid phenomenon [illegible] in ascerting, that no organ or tissue in the body is more liable to inflammation than the pleura. I shall limit my few remarks more particularly to the acute form of the disease, as it would be a difficult matter to em[illegible] [illegible] The pleura [illegible]

condition presents a smooth and polished surface, covered with a layer of polygonal flat, nucleated endothelial cells; the surfaces are constantly being lubricated with a slight serous transudation, which p[illegible]

[illegible]

es, producing no appreciable sound, in elevation and depression of the thorax, which is constantly going on during respiration: but in fl[illegible]ation of this membrane induces changes both in quantity and quality of this serous transudation, and in the membrane. The anatomical characters of acute pleurisy are as follows: redness from hyperaemia of the vessels within [illegible] the pleural membrane, and the [illegible] for a brief period after the commencement

of inflammation due to suppression of the transudation which moistens it in health.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] thickened, opaque, and diminished in consistence from serous infiltration into

[illegible]

[illegible]

[illegible]

([illegible])

[illegible] coagulation in the exuded liquor sanguinis, [illegible] the surface more or less extensively, varying in quantity and character, and being usually [illegible]

Coagulable lymph [illegible]
begins to accumulate [illegible]
in some cases from a very early period. in
[illegible]
[illegible]
as to [illegible] completely: more or less blood
may be [illegible]
ably due to decomposition. The endothelial
cells of the membrane undergo proliferation, and new cells are formed in the exudation [illegible]
[illegible]
of the exudation is taken up after undergoing degenerative changes, while the remainder [illegible]
[illegible]
[illegible]

undergo [illegible]

[illegible] formation of cells, the fluid [illegible]

[illegible] remains and bec[illegible]

[illegible] exudation [illegible]

[illegible]

[illegible] or calco[illegible]

When the accumulation of [illegible]

[illegible] of the disease takes place in such qua-

ity as to fill the pleural cavity, the lung [illegible]

[illegible] into a small solid [illegible] becoming

completely carnified. The quanity of se-

rous exudation [illegible] to the in-

tensity of the inflammation, as [illegible]

does not usually exceed [illegible]

[illegible]

[illegible]

The effused fluid is not everywhere clear like serum of the blood [illegible] sical effusion, - the [illegible] clear but near the bottom [illegible] serum with flocculi [illegible]

[illegible]

[illegible]
[illegible]
fected side is diminished or almost com-
[illegible]
is deficient or absent below; in excess
above. As absorption takes place there
is a gradual subsidence of the signs
above described, and their restoration
to the normal; there is often a return of
the friction sound, called the return friction
sound, and sometimes the friction frem-
itus; dullness may continue for sometime.
The side resumes its proper form and size,
[illegible]
[illegible]
[illegible]
of adhesions; or it may be more or less

[illegible] in the chest. If the lung does not [illegible] together, and all the diameters of the chest are diminish. Movements null or greatly diminished: on percussion there is [illegible] are feeble over the side generally. Some [illegible] ical signs of pleuritic effusion are [illegible] displaced than in adults: sometimes when the thorax [illegible]

from previous attacks [illegible]
of pleurisy considerably.
Acute pleurisy may be produced by penetrating wounds of the chest, or by contusions, especially [illegible] the ribs; [illegible] access into the thoracic cavity, as pus or air; local deposits in the pleura, such as cancer or tubercle; diseased bone; friction or pressure by tumors: in certain cases this disease is attributed to the action of cold or other injurious meteorological influences [illegible] any such mode of causation. In some cases it is developed spontaneously, that is it [illegible] It often occurs in persons [illegible] Bright's disease, [illegible] nection with various acute febrile diseases.

infectious [illegible], [illegible] typhoid, puerperal fevers, or acute rheumatism; pyaemia and septicaemia; or alcoholism.

Acute pleurisy is rare in infancy, but is not uncommon in childhood; it is much more frequent in youth and middle [illegible] age; it is more common in males than in females. The tuberculous and serous varieties are more frequently met with than the other varieties of pleurisy. Recovery takes place even with large effusions, in serous pleurisy, and absorption is remarkably rapid after aspiration: unless the pleurisy is tuberculous, or associated with some serious constitutional or local disease, death is a rare event in acute cases. Death may be due to the mere mechanical effects of the fluid effusion, accompanied with pulmonary congestion and oedema, and there is danger

of sudden death should there be [illegible] ef-
fusion, or if the heart is much embarrassed.
Not uncommonly [illegible]
[illegible] in [illegible], re-
traction of the [illegible]
[illegible], with permanent binding down of the
lung — [illegible] dis-
charge, either by an external opening;
[illegible]
direction, such as into the intestines. The
[illegible] of pleurisy [illegible]
may ultimately [illegible] such [illegible]
asthenia, or may become phthisical.
The [illegible] pleurisy [illegible]
liable to be confounded [illegible] pleurodynia,
pericarditis and pneumonia. The [illegible]
of acute pleurisy [illegible]
signs, taken [illegible]

In pleurodynia all the physical signs of pleurisy are wanting, with the [illegible] of diminished respiratory murmur, conse- [illegible] the [illegible] of [illegible] in breathing. There is [illegible] an absence of fever and cough; the pain is also more shifting than in pleurisy [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] between pleurisy and [illegible] the defined outline and situation of the dullness on percussion; [illegible] with the posture of the [illegible]; by the [illegible] of the friction sounds and by the absence of oegophony. The difference between the symptoms of pleurisy and pneumonia consists in the invasion of pleurisy being accompanied with several moderate rigors [illegible]

slight chills, if any: invasion may be very insidious. In pneumonia there is a single, severe, prolonged rigor at the outset, usually. [illegible] side frequently; not stitchlike, but [illegible] dull and diffused.)

The cough in pleurisy [illegible] pneumonia [illegible] and painful. Expectoration in pleurisy is absent or very slight, and of no special character; in croupous pneumonia the expectoration is considerable; viscid, tenacious, and "rusty": in [illegible] "rusty". The breathing in pleurisy is disturbed [illegible]

later on there is more or less actual dyspnoea. In Croupous pneumonia the breathing is very rapid, and much increased in respiration ratio, but not proportionate feeling of dyspnoea: in catarrhal pneumonia

and there is no regularity in the course of the temperature, [illegible]

In Croupous pneumonia the temperature [illegible] running up to 103°, 104°, 105° or more, and runs a regular course; the skin is normal and dry, in catarrhal pneumonia the temperature is high, [illegible]

ration as well as expiration: in pneumonia you only hear the crepitant rale during inspiration. In cases of pleurisy when exudation has taken place you have no resonance, but flatness on percussion; while in pneumonia you have increased vocal resonance. In pleurodynia you have pain in three points, - viz.:- at middle of the sternum, - one near the spine, and one near the axilla.

The prognosis of acute pleurisy is always good, provided the lungs be previously healthy, and the constitution of the patient not impaired. If absorption of the effused products does not take place, the pleura may become thickened, - [illegible] should intervene. Acute pleurisy is more serious in proportion to the amount of fluid poured out, and the time that it

has remained in the pleural cavity; and to its tendancy to become purulent: severe dyspnoea is a dangerous sign; also when it occurs in advanced cases of chronic [illegible] (R) [illegible] [illegible] [illegible] [illegible] untoward termination.

In the treatment of acute pleurisy [illegible] objects [illegible] to [illegible] and [illegible] fluid [illegible] out: in other words the treat-ment relates to the employment of [illegible] curative, and palliative measures. The treatment [illegible] of pleurisy [illegible] differ [illegible] in different cases, and every [illegible]

protest against an [illegible] practice of re-
moving blood, blistering and administering
mercury in this disease, which, whatever may
be said to the contrary, is even at the present
day by no means an uncommon mode of pra-
tice. The ultimate objects to be aimed at
are not merely to save the life of the patient,
but to restore the parts affected to as
normal a condition as possible.
The first thing to do in the treatment of [illegible]
[illegible]ation of synovial, as well as of most serous
membranes, is to keep the structures affected
in as complete a state of rest as can be
obtained. It [illegible] that this [illegible]
should be the primary object to be kept
in view in the management of pleurisy.
The affected side should be mechanically
fixed, and thus [illegible] or prevent [illegible]

movements, by [illegible]
[illegible]
terial, from three to four inches wide and of
[illegible] should be applied around
the affected side, from mid-spine to mid-
sternum, in a little [illegible]; it is best
applied [illegible]
[illegible]
[illegible]
directed [illegible]
at mid-spine and [illegible]
even around the side, in the direction of the
ribs; then another strip is laid on across
this, also extending from mid-spine to mid-
sternum, but in the opposite direction to
the first. [illegible]
is scarcely ever required in pleurisy;
in some cases leeches may be applied to

[illegible]

when pain is severe, opium should be given sufficiently to relieve pain and tranquillize the system: I would give gr. ½ [illegible] [illegible], and at the same time give grs. XV – XX of Sulphate [illegible].

The patient should be kept quiet, and free from [illegible]

[illegible] M[illegible] ([illegible]) [illegible] may also [illegible] the inflammatory [illegible] [illegible], [illegible] the [illegible] [illegible] effusion small blisters may be employed; they should be [illegible] applied in different situations, removed as soon as vesication commences, [illegible]

being allowed to drop its coiling, accomplish-
ing all the wound to be effected in this way
with the smallest amount of inconvenience
both to the physician and patient.
Depletion by purgatives may be useful
not only by lessening fever but by promot-
ing the removal of effusion; diaphoretics
are useful by contributing to the two ends
last stated. Opium is indicated in rela-
tion to the pain and constitutional dis-
turbance, and sedative remedies addressed
to the circulation may be employed.
When there is much pressure from the ef-
fusion, or extreme dyspnoea, aspiration
should be resorted to; introduce the
needle where there is most dullness, by
doing this you are safe from puncturing
the lung; I would advise between the

5 and 6 ribs in 6 space, about the mid-axillary line: this is the spot usually selected for making the opening in performing paracentesis thoracis.

(F) Paracentesis is indicated when there is a large effusion accompanied with dangerous symptoms, namely severe dyspnoea and increasing orthopnoea, a tendency to cyanosis, or symptoms indicating serious interference with the functions of the heart: in such cases delay is highly dangerous, as sudden death may occur at any moment, and the relief which follows the removal of the fluid is usually very marked: this operation should also be performed when the fluid is known or suspected to be purulent; in doubtful cases an

exploratory puncture may be first made, and when [illegible] dulness has been found at the upper part of the chest.

The existence of pyrexia, of some constitutional condition such as tuberculosis or of general debility, does not contraindicate paracentesis in pleurisy, and the removal of fluid often causes marked improvement in the general condition.

When drawing off the fluid, if the patient complains of a sense of constriction, severe pain and dyspnoea, violent cough, or the escape of blood, you should stop at once. Occasionally it is desirable in cases of purulent pleurisy to use drainage or antiseptic injections such as a solution of quinine, weak carbolic acid solution or alcoholic tinct. of iodine. The formation of pus

may be prevented by washing out the pleural cavity with antiseptics.

The chief symptom which calls for prompt attention in cases of pleurisy is pain in the side. If not relieved by rest obtained by strapping, the best [illegible] hypodermic [illegible] injection of morphia. If the [illegible] is not strapped the application of hot fomentations, linseed-meal poultices, or sinapisms must be tried. Urgent dyspnoea called for paracentesis usually. Cough must be relieved if troublesome by sedative remedies. Patients suffering from pleurisy need not be kept low as regards diet, but stimulants are apt to be given at first. If the strength fails and especially in the chronic forms of the disease abundant

nutritious food is required, with wine or beer. Quinia, iron, mineral acids, cod-liver oil, and other remedies of this kind are also very useful at this time. The treatment of secondary pleurisy must be guided by the condition with which it is associated. Lowering measures are especially to be avoided in this class of cases.

Respectfully,
J. Samuel Offutt.

Thesis
on
Antiseptic Surgery
by
John B. Parker

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Antiseptic Surgery

The subject of antiseptics in surgery is now so important, that I think I am justified in selecting it, as the title of my Thesis - This method was first introduced by Sir Joseph Lister formerly of Edinburgh, but now of King's College London, and its adoption has wrought quite a revolution in the treatment of wounds. At the same time there are quite a number of distinguished surgeons, who have not adopted it, that claim equally as good results as those who practice it; but I do not think that these assertions are upheld by statistical evidence - To one not understanding

Clearly the principles of antisepsis and the recent advances made in perfecting and simplifying its practice, it may seem to complicated and expensive for every day use, but a little study into its methods and details, will soon convince you that it is a mistake. Of course it is a little more trouble to observe all the strict rules that are necessary but having practiced them for a time, it becomes a matter of habit and you no longer give a thought to the trouble. The cost of the first dressing, it is true, is more than a single

non antiseptic dressing, but where one antiseptic dressing is required say, in two weeks, a dozen or more of the [illegible] would be necessary. It is the same way with the amount of labour expended, for while you let one antiseptic dressing remain for two weeks, a non-antiseptic dressing would have to be changed every day, and lastly but most important of all, is the much more satisfactory result that is obtained. The result which we aim at in the treatment of wounds is [illegible] by the [illegible] intention, [illegible] [illegible] [illegible] [illegible] [illegible]

method in wounds shut off from the atmosphere, but in wounds exposed to the atmosphere, and open to a certain amount of irritation, or under the non antiseptic treatment, generally dead by granulation, in which case we have suppuration, [illegible] perhaps by septicaemia and necrosis. This is all because there is communication with the air. The causes of these changes are almost entirely due to the [illegible] in the discharges from the wound. These organisms, entering

the wound from without, they are termed bacteria, and are [illegible] by subdivision - Micro organisms are present in all dust, in water, on the surface of the body, and in the air of various localities, in this way they give rise to fermentation and [illegible] matter - The object of the antiseptic method is to exclude these causes of septic poisoning and render them innocuous should they gain admission. To effect this result, certain substances are used to disinfect

all objects that are contaminated, as the patient, skin, the [illegible] hands, instrument [illegible] and when the wound is [illegible], to keep it free from active septic matter - The most important [illegible] these substances are carbolic acid and the bi-chloride of mercury These destroy the spores, and are [illegible] [illegible] acid with the steam spray, was the substance first employed by Sir Joseph Lister, but carbolic acid has [illegible] almost [illegible] superceded by the bi-chloride of mercury, and the spray has been abandoned as useless and

cumbersome. The advantages of [illegible] over the solution of carbolic acid are, first that it will destroy the spores more rapidly and in a much more dilute solution, a solution of one to 3,000 destroying them in few minutes whereas it took a five per cent solution of carbolic acid twenty four hours to destroy the spores and weaker solutions were found, ineffectual, the strength of the bichloride of mercury, generally employed is one part corrosive sublimate to one thousand parts water

[illegible]

that it not only burnt and irritated the surgeon's hands, but also injured [illegible] and not a few cases were attended with carbolic acid poisoning. It is still employed to a certain extent to disinfect the instruments, and render antiseptic the sponges, drainage tubes &c, on account of the corroding action of the mercury. The mercury is open to none of these objections, it is cheap, easily [illegible]

in a pure state, the spray is done away with, and the wound is kept aseptic by interrupted irrigation. The bichloride solution not only has a mild astringent effect on the tissues which checks hemorrhage from small vessels and lessens the serous discharge following all wounds, but another great advantage is that it remains in the dressings for an indefinite period. Iodoform is used a great deal in this country to powder over the closed wound, and to disinfect the dressings it also stimulates the healing process and lessens

[illegible] salicylic acid are also used to a slight extent in antiseptic surgery. Carbolized catgut should be used to keep the edges of the wound in apposition or carbolized wire if there is much tension. The arteries should be ligated with carbolized silk. The sponges used in the operation should be rendered aseptic before applying them to the cut surfaces. The drainage tubes should be constantly kept in a solution of one to thirty carbolic acid, but the best drainage tubes are made from

decalcified bone, which should be kept stored in alcohol, the advantage in using them is that they are completely absorbed by the tenth day, consequently you ~~[illegible]~~ [illegible] remove the dressings to take them out; The best dressing is the bi-chloride [illegible] cotton - laid between two layers of iodoform gauze. Having mentioned the most necessary material to be used, I will now enter into the details of an antiseptic operation. It is most essential that [illegible] cleanliness should be observed

both on the part of patient and
on the part of the surgeon and his
assistants. The part to be operated
upon should be thoroughly cleansed
with a stiff brush soap and
hot water, the limb should
also be shaved, but, I strongly
advise the use of turpentine
or ether, in washing off the limb
to clear out the fat, if turpentine
is used it should be washed off
afterwards with hot water, if
ether is used, it will evaporate.
Having done this, the part should
be washed well with the one
to one thousand solution of
bi-chloride of mercury; The

instruments should be placed in a tray containing one to thirty solution of carbolic acid and after each instrument is used it should thoroughly washed off, with hot water, and put back in the tray containing the disinfectant. The irrigation of the wound with a 1-2,000 solution of bi-chloride of mercury, should be continously kept up during the whole operation. All the ligatures, sutures, drainage tubes, bandages, and articles used for dressing the wound, should be of the same material as previously

mentioned. The surgeon and assistants should take off their coats, roll up the sleeves of their shirts, and scrub the forearms, hands & nails, and then disinfect them, with the bichloride solution. Under ordinary circumstances and if the proper precautions have been ~~mentioned~~ used, the dressing need not be removed until healing is complete, but the drains should be removed immediately if the troublesome hemorrhage occurs, if symptoms of septic absorption set in, shaking, failure in some of the antiseptic

details, or if a temperature of 102°, persists after the second day - I will conclude my thesis, by saying that I shall strongly insist upon the adoption of this method, even in the trivial wounds, that I may be called upon to treat, as soon as I am competent to enter the ranks of the noble profession which I have selected, believing that it will add greatly to my reputation, and be a source of comfort and safety to my patients, invoking the leniency of my learned and distinguished teachers as to any mistatement,

that I have been guilty of, for I have ~~been~~ endeavored ~~to give~~ to give my own ideas on this subject without referring to the recognized authorities, I remain

Very respectfully
John H. Parker

701 Lombard St.
February 16th 87

Thesis

on

[illegible]

by

L.W. Parshall.

Perryville,

Ill.

January 29th '87. A.D.

205.

and internal ear, one of these, the foramen ovale, is closed by the foot of the stapes, the other, the foramen rotundum, by a very thin membrane. Situated internal to the middle is the internal ear, which is by far more complex than either of the other two portions. It first contains a vestibule from which lead three semicircular canals at right angles to each other. Also communicating with this is the cochlea a spiral canal which is divided into three portions. The internal ear is connected with the brain by the auditory nerve through small foramina opening into the internal auditory meatus.

Having considered the gross anatomy of the organ will attempt to give in a succinct way the mechanism of hearing.

Sound, which is a peculiar sensation transmitted by the auditory nerve to a certain part of the brain

called the center of hearing, is caused by the vibrations of some elastic body, which vibrations cause [illegible] little waves of air to strike against the tympanum causing it to vibrate, which in turn transmits the motion to the little muscles which is [illegible] transmitted to the internal ear by [illegible] of the [illegible] of the stapes upon the liquid [illegible], but however these points will be taken up separately, hereafter.

The pitch of a note depends upon the number of vibrations caused in a given time. This we can see in any stringed instrument, the more tension the string has the greater the rate of the vibrations, and hence the higher the pitch, when the vibrations fall below thirty per second there is no sound audible. Vibrations upon different instruments having the same rate have the same

pitch.

[illegible] tude of the vibration. This [illegible] mount of excursion of the vibrating body is called the amplitude of the bibration

[illegible]

Most sounds however that we hear are not simple tones but are combined with other [illegible] guitar and then placing your finger upon the string just struck, there is a tone remaining caused by the vibra- [illegible] almost sympathetically.

[illegible]

ber, intensity, and variety of the overtones

How sounds in reaching the ear do not have to come directly through the medium of the air, for [illegible] transmit sound, and we know that all the workings of the ear are inside the petrous portion of the temporal bone, This transmission of sound has been demonstrated by means of the dentiphone

[illegible] which tests it. we will proceed to take up one sound and trace it through to its final destination, the auditory centre in the brain.

[illegible] by the vibration of some elastic body, strike the pinna [illegible] external auditory meatus so as to concentrate it, The muscles in the pinna in man are small, so

that the pinna is only movable to small extent, compared with the horse. In these animals it seems to [illegible]

The auditory canal, an irregular passage larger at its inner extremity than its outer and containing some [illegible] ing a waxy substance for lubrication, terminates at the membrana tympani. The walls of this canal are bone so that the elastic body of air does not loose its elasticity by expanding the walls but by the yielding of the membrana tympani. This canal has a note peculiar to itself. I have often experienced a sound, which was of the same pitch as the to which the canal [illegible]

the inner end of the canal, this membrane has at-
tached on its inner surface a little below its centre
the handle of the malleus, and also attached to this
little bone is the tensor tympani muscle which as its
name indicates pulls on the handle which in turn
is fastened to the membrane, therefore when this mus-
cle acts it tightens the membrane preparing it for [illegible]
[illegible] sounds. This membrane has no certain key-
tone to which it vibrates, its tension is [illegible]
the point at which the malleus is attached [illegible]
[illegible]
[illegible]
[illegible]
tone is of a certain pitch to correspond with those
parts of the membrane, or in other words the tenser
the membrane the higher the pitch. If it were not
for this the membrane would have one certain tone

[illegible]

brane as we have said varying in tension in its different parts, and of course having no self-tone, no one tone is more conspicuous than another. The continued vibration of the membrane is prohibited by the attachment to it of the handle of the [illegible]. [illegible] sides of the membrane, this facilitates its vibration. This can be seen when we have a bad cold that our hearing is impaired from the closure of the eustachian tube, this causes the air in the tympanum to have no access to the air without and causes a difference of density & therefore a difference of pressure on [illegible]

[illegible] into vibration causes the handle of the malleus to

moves, and the malleus being attached to the incus, causes it to move also which in turn presses against the stapes causing its movement to accord with the other two. The foot of the stapes fits in a little opening on the inner wall of the tympanic cavity called the foramen ovale. The pressure of this foot against the fluid in the labyrinth is eased by an opening called the foramen rotundum situated just below the foramen ovale. The stapedius, the smallest muscle in the body, is attached to the stapes in its neck, and draws the bone out of line of motion, and is supposed thereby lessen that which might be too great ones. In this cavity are the mastoid cells which also aid in the transmission of sound.

The part of the mechanism of hearing already described is comparatively easy and plain, but he did connect

The pressure of the foot of the stapes upon the fluid of the labyrinth causes a wave to take place according to most physiologists, but one physiologist of considerable note says that he thinks it impossible for a wave to be produced in a body of fluid, and that the force exerts a mere pressure upon the liquid, and by this excites the nerve terminals of the auditory nerve. This seems hardly probable, for would not the pressure be exerted upon all the nerve terminals alike whereas if a wave be propagated only some fibres corresponding to the undulations of the wave would be

The theory of the present day is, however, that the little stapes pressing upon the fluid propagates a

through the entire internal ear, and the walls of this part being inelastic the wave is not diminished in its course. The wave passes through rather a complex route, being probegated by the foot of the stapes in the vestibule it passes from the vestibule through the vestibular opening along the vestibular canal of the cochlea till it reaches the summit where it returns in the tympanic canal ending at the for[illegible] called the membranous canal of the cochlea which contains the endolymph. This canal is formed by two membranes running out from the edge of the bony spiral, and attaching themselves to the wall of the cochlea, forming a triangular space [illegible] only be theorized upon. The nerve endings in the vestibule are not of much importance and can only

e explained as communicating noises, while those of the semicircular canals can only be explained by experiments such as pigeons, by which it has been thought that they perform the function of equilibration. On the other hand the nerve terminals of the membranous portion of the labyrinth can be explained as being agents by which the different tones are transmitted to the auditory centre.

One of these membranes first spoken of in forming the

membrane of Reissner. Above this canal is the vestibular canal, below it is the tympanic. These canals communicate at the top of the cochlea and contain the perilymph, so that the same fork passes above and then below the membranous canal which contains the endolymph.

The basilar membrane of this canal is made up

of transverse fibres varying in [illegible]
longer as you reach the apex of the cochlea for the
reason that the bony portion of the cochlea to which
the bony spiral lamina is attached is of a conical
shape. The fibres of this membrane are supposed to
act as the strings on a piano, now upon this membrane
two rows of rods are placed called the rods of Corti-
estimated at about three thousand, these are so
arranged that they are separated at the bottom and
come together at the top forming between the rows
and basement membrane a small triangular
[illegible]
cells a number of hairlike processes project-
[illegible]
there is a very delicate membrane called the
[illegible]

Taking the auditory [illegible]

we have it entering little canals in the central bony column of the cochlea and these give off branches which pass through the osseous spiral lamina and thus reach the basilar membrane. There is a chain of ganglion cells in the bony spiral lamina which is connected with the radiating nerve fibres passing to the basilar membrane. Now these nerve endings pass through these cells lying next to the rods of Corti

[illegible]

this portion of the ear, will go on with the wave after its probegation by the stapes. This [illegible]

nal passing above the membranous canal, [illegible]

[illegible]

branous canal. In passing below the membra-

derstand, for we know that loudness depends upon the amplitude of the vibration. Therefore if this be great the sound will be loud, + vice versa

Now pitch is some what more difficult. Every sound producing body has a proper tone, now if this may be set in vibration by the voice over the strings of a piano the string corresponding to the number of vibrations made by the voice will be set in motion, and all the other strings bearing a certain ratio to the vibrating string will also vibrate. These better vibrations are called harmonics or overtones.

We can easily see that the pitch of a note depends upon the number of vibrations, so to raise the pitch of an instrument adjust it so as to increase the number of the vibrations in a given time. This can be seen in tuning a violin. In the car these transverse vibrations of the [illegible] membrane have different lengths [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

tone with [illegible]

which gives rise to the impression of a quality which we associate with that of flute, piano &c. With regard to our ascertaining the distance at which we are placed from a vibrating body producing a sound, depends upon our judgement and experience. In ascertaining the direction sound you generally note with which ear it is perceived with most distinctness - very often we are uncertain unless we turn our head or change our position. Such animals as horses can [illegible]

[illegible]

[illegible]

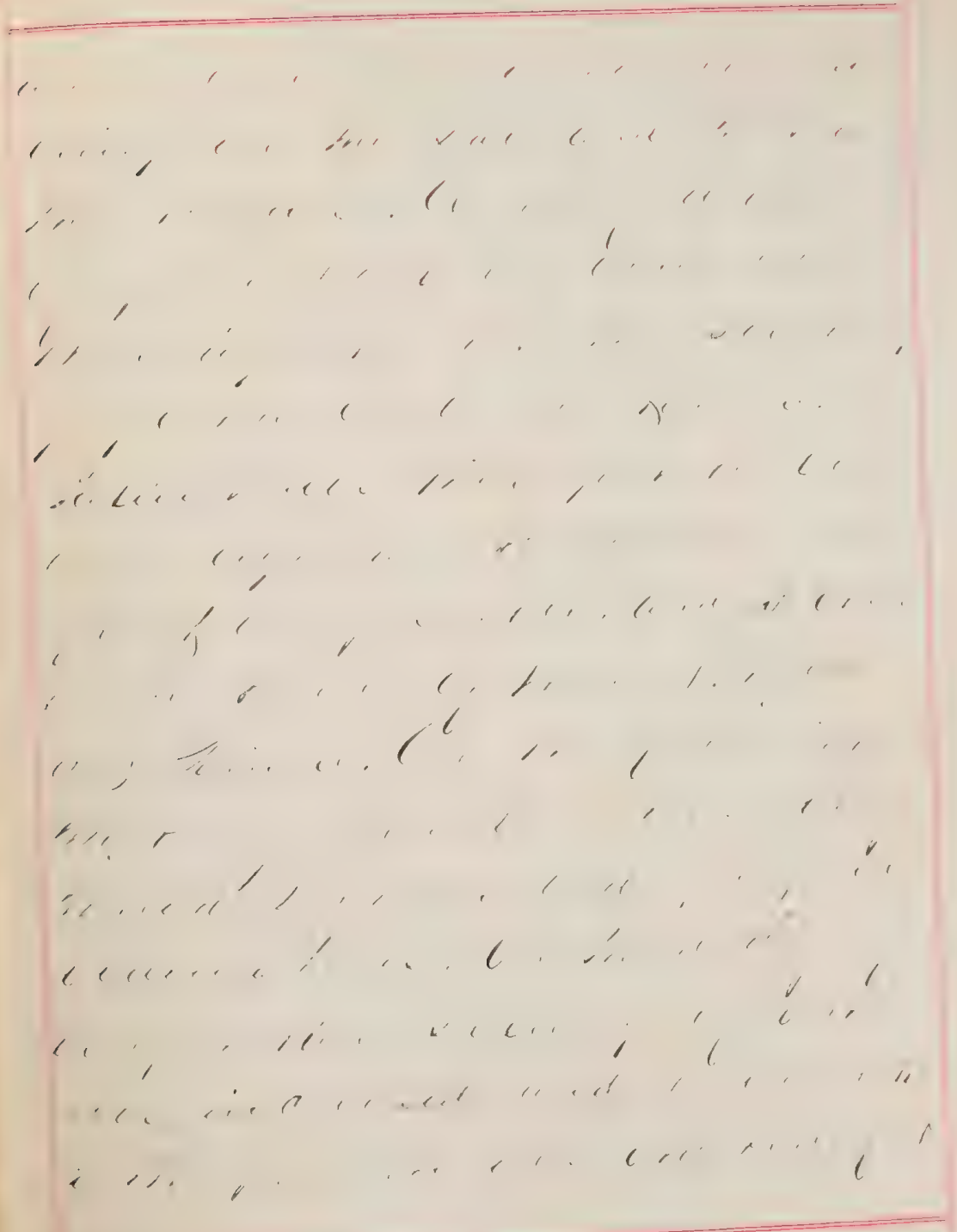
Thesis by

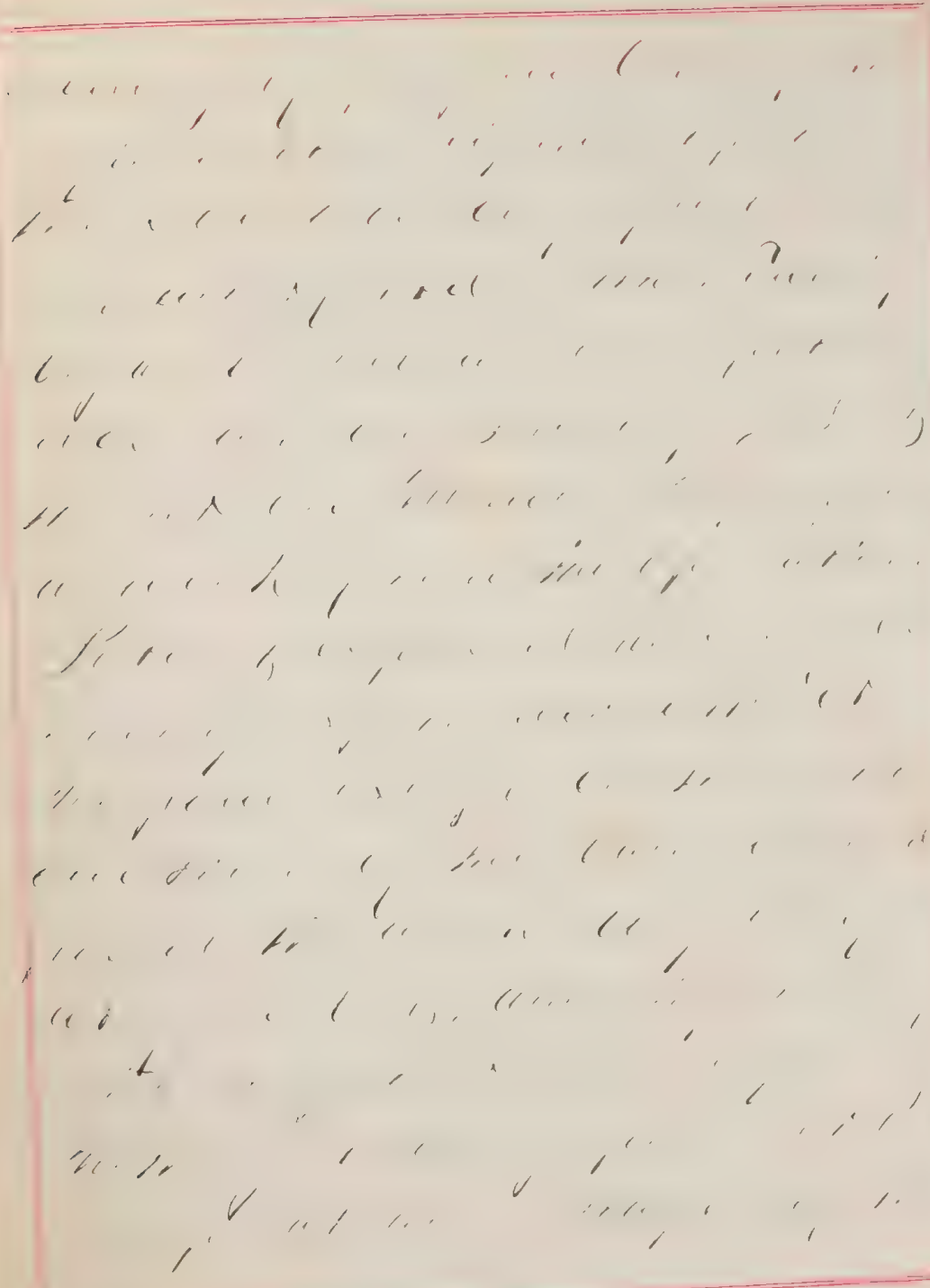
W. D. Pemberton

Class of 1887.

Regulating Cases.

38 P.



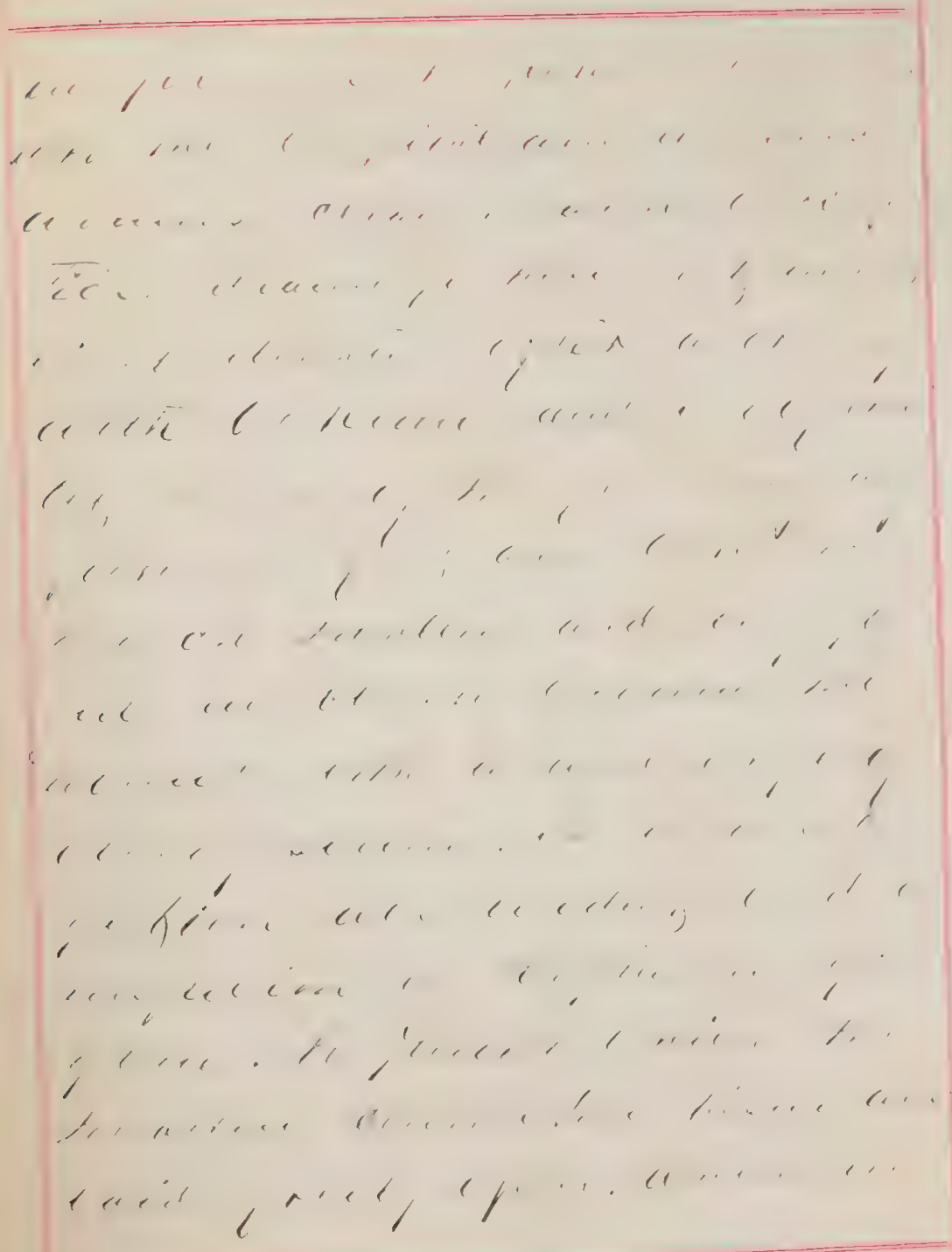


treatment. The fluid on examination was found to be of a deep sperm color and contained a few flocculi of lymph and albuminous as shown by test. Cure seems to be permanent as at present there is no return of the fluid while after the first tapping fluid began to reaccumulate almost immediately. Bryant prefers to use Tr. of Iodine as an injection but carbolic acid seems to act perfectly [illegible] and gives little or no pain but acting rather as an anaesthetic on the terminal [illegible]

Observations of Sir

on Diseases of the Liver, from
Dissection in Life, Post, in the
Year 1821. Communicated by
Sir Astley Cooper, Bart. and read
before the Royal Society, Nov. 29, 1821.

Sir Astley Cooper first drew the
attention of the profession to the
subject, in the Medico-Chirurgical
Transactions, Vol. 1. and also in an
Essay on Diseases of the Liver, in
which he has described the symptoms
and treatment of Abscesses, Ulcers
and Schirrus of the Liver, and
has given a case of Hydatids, in
which the puncturing them in the
right side, and evacuating the
contents, was successful in saving
the patient's life. Since the publication
of that work, many cases have
occurred in which the same operation
has been performed with success.
Some surgeons think, however,



The Stump and leg for some distance above the knee became very much swollen, presenting the marble appearance of a deep phlebitis. The superficial veins were very prominent. The [illegible] were [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. On 3rd day patient's morning temp. [illegible] pulse [illegible] 101.[illegible] [illegible] 10[illegible] [illegible]ively. Evening temp. 101.8° - pulse 113. On 4th day Morn. temp. 98.8° - pulse 115. In the Evening temp. 103.1° pulse 105. Patient was very weak and suffered a great deal of pain necessitating the free use of Opium. On [illegible] day Morning temp. 101.8°. pulse 100 - In

lation and death of the parts. Care should
be taken to remove the band at
the right time, viz. just as soon
as the circulation of the parts is
[illegible] to maintain their vitality.
Patients [illegible]
with [illegible] in stimulation
of whiskey every three hours [illegible]
[illegible] afterwards the
tr. of chloride of iron was also given
Morphine was given whenever necessary
to allay pain.
[illegible]
[illegible]
[illegible] These were
[illegible]
freely opened. The [illegible]
[illegible] tissue
[illegible]

regained their normal appearance while patients grew stronger every day. As a result, patients were have a good and useful stump.

Lobar Pneumonia.

It was [illegible] from patients history that he had been suffering from an attack of Pneumonia, which diagnosis was confirmed by an examination which elicited the following.

Inspection revealed only a diminution on the affected side or left. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] increased. [illegible] [illegible] dullness [illegible] [illegible] of left lung but not [illegible] [illegible] [illegible] the [illegible]

[illegible]

[illegible] [illegible] [illegible]

[illegible]

[illegible]

[illegible]

Patients temperature [illegible]

[illegible]

Pulse was 108 - Respiration thirty

[illegible] x (36). He was given x [illegible]

[illegible] x [illegible]

[illegible] of Carbonate [illegible]

with [illegible] three times

[illegible] - milk [illegible]

He [illegible]

[illegible] was 1[illegible] - [illegible]

respiration 36 - Expectoration

was losing its brick dust [illegible]

pearance and becoming [illegible]

and mucopurulent but [illegible]

Patients temperature remained nearly normal but his lung [illegible] not [illegible] [illegible] broncho-[illegible] [illegible] was heard with diminished [illegible] in the [illegible] for [illegible] [illegible] [illegible] [illegible] the apex of [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] bronchial [illegible]. Other points in the lung seemed to persist for some time - but resolution was aided by an occasional blister and patient fed on Cod liver oil and tonics with good food. Under this treatment

[illegible] affected [illegible]
[illegible]
Though four weeks have elapsed
[illegible] patient was first taken
[illegible] to have thoroughly
[illegible]
The [illegible] resolution in this [illegible]
was [illegible] due to the patients
bad hygienic surrounding and
[illegible] to his admit
[illegible] to the Hospital and
the fact of his alcoholic habits.
[illegible] fact of his careful
[illegible] appreciation
[illegible] condition but
[illegible] much less
[illegible] result must have been [illegible]

No 5.

Resinæ & Pulpisin.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

but his [illegible]

[illegible]

this was a true [illegible]

[illegible] acute articular rheumatism

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

half past three with what he
supposed was a piss-proud.
He [illegible]
and went back to bed, sle-
ping till six, wh[illegible]
and went about his work
with a pretty firm [illegible]
but no pain. It worried him
more or less during the day,
growing painful towards [illegible]
ing. On wiring at night, being
a married man though there
was no venereal desire [illegible]
with the erection, nevertheless,
tried the effect of sexual con-
gress for about twenty minutes.
This gave him a great deal

of pain and [illegible]
[illegible] excitement following
his efforts he gave up in
disgust. On the following [illegible]
he sent, for a Physician
and was treated with sedatives
and various other [illegible]
as leaches to bulbous portion
of the penis &c. but [illegible]
being obtained and [illegible]
growing more severe [illegible]
came to University Hospital
[illegible]
[illegible] The [illegible]
On examination the penis was
found to be as follows:
The [illegible]

base. The pain was acute and patient described it as being of a "grumbling" character between the more acute attacks. He was [illegible] XL [illegible] [illegible] at night but [illegible] good was obtained [illegible]. He was kept on the verge of opium narcosis, by means of hypodermics of Morphia, with bromides, purgatives, tobacco poultice and other agents but all proved useless. Patient was brought under the influence of Minia to correct any malarial cachexia that might be present. He was also brought

wisdom of his decision, [illegible]
The [illegible] after a lapse of
eighteen days [illegible] softening
was noticed and from this
on the organ began to relax,
having [illegible] gradually [illegible]
Patient improved steadily and
left hospital cured, on the
5th of Feb. The erection lasted in all
twenty eight days. The case is
interesting from the fact of its
being rare, only a few being
on record and also as the
pathology so far is entirely
unknown. Treatment so far as known
[illegible] is of no avail. It [illegible] well
in its own way and time.

Ulcer of the Stomach,
Ibid.
J. Kerr on Pennington,
Session of 1886 7.

22 P

[illegible]

[illegible] situated near the [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

located in the Epigastrium,

It may also be located [illegible]

back about the eighth or ninth

dorsal vertebra — between the

shoulders, This is not an early

symptom, though it is an

important diagnostic point

[illegible]

[illegible]

[illegible]

[illegible] that the ulcer is situated in the anterior wall of the stomach [illegible] so much upon the anterior part of the stomach

Nausea and vomiting is a constant symptom and [illegible]

some large vessel, then perforation occurs there is collapse and the usual symptoms attending the development of an intensive peritonitis.

Diagnosis. It is to be distinguished from chronic gastritis and cancer of the stomach.

In gastritis the pain is not so intense as in ulcer and it is not found in the back between the shoulders. In gastritis, thirst, a coated tongue and feverishness are prominent symptoms which are not present in ulcer. In gastritis the vomiting usually occurs in the morning and consists of stringy

[illegible] occasionally streaked [illegible], [illegible] vomiting [illegible] follows the ingestion of a meal consisting of the contents of the stomach and blood may be in large quantities.

Cancer of the stomach is usually found in the middle period of life, is rarely [illegible] before forty, and is more common in males than females, while ulcer is more frequently met with in females between the ages of [illegible] and thirty. In cancer there is a tumor, which is absent in ulcer. In cancer the pain is [illegible] and continuous and

[illegible]
ulcer it is gnawing, intermitted and is increased on taking food. In Cancer the hemorrhage is from oozing and is usually small in amount has a "coffee ground" appearance, which is due to the action of the acids of the stomach on the blood while in ulcer it is more abundant and brighter red ... like arterial blood.

Prognosis. It is generally good, though not so favorable when it occurs in the aged. More than one half of the cases recover. The duration is variable. It may terminate favorably in a few weeks, or last

over a period of two or two and one
[illegible] years. [illegible]
occur from hemorrhage, [illegible]
haustion or peritonitis.

Treatment [illegible] is no [illegible]
[illegible] The important points
to be kept in mind during a
course of treatment are rest,
relief of pain, prevention of hem-
orrhage, and the promotion of
Cicitrization.

To secure rest the patient
should be kept in bed as there
will be less activity of the Cir-
culation and he will [illegible]
less stimulating food, he should
be restricted to a milk diet of

possible, which [illegible]
medicine and liquids long to
digest. Flavoring milk [illegible]
the best articles [illegible]
rapidly absorbed, but if [illegible]
not be obtained then use lime water
and milk, should give a small
amount at a time tablespoon
full every half hour or hour and
gradually increase the amount
until the patient can take as
much as four ounces every three or four
hours. Avoid all articles that
give pain and much cause
it, then administer an enema
of milk and pepsin every third
hour. Beef peptonoids in a

ten or twenty Minims of the Fluid
Extract of Ergot [illegible]
[illegible] in water hypodermically
[illegible] has been [illegible] hypodermically
and then it will not come in
contact with the stomach
The soluble [illegible]
Subnitrate of Bismuth and
nitrate of silver have been found
to be the most useful.
Subnitrate of Bismuth in
fifteen or twenty grain doses
three or four times a day
acts by forming a kind of
Coating over the Ulcer, and
at the same time it has
an astringent effect upon it

Should this not prove effi-
cacious [illegible],
then give one fourth grain
of Nitrate of Silver [illegible]
[illegible] extract of
[illegible]
If Constipation is present
it may be relieved by one
[illegible] one or two least
teaspoonfuls of Castor oil [illegible]
[illegible] when [illegible]
may give alkaline mineral
waters to assist nutrition.

Deplüwrid by [illegible]

It is a [illegible] of [illegible]
Countries and is liable to
occur at any season.
It is characterized by
a whitish membrane forming
on a mucous surface [illegible]
[illegible] but [illegible]
[illegible], the
this formation is follow
ed by rapid prostration
and very great Anaemia.
It attacks both old
and young, but is usu
ally a disease [illegible]
[illegible], although [illegible]
during [illegible], between
the years of three (3) and

six (6) being the [illegible]
which it is most [illegible]
as well as most [illegible]
Six are liable [illegible]
[illegible]
[illegible]
[illegible] general [illegible]
[illegible]
of those exposed, it; have
much to do with its ex-
emptment, a person in
ill health being much
more liable than one in
[illegible]
[illegible]

Germs may be carried in the [illegible]
also [illegible] unexpectedly by in-
oculation, Letzerich, Ertel [illegible]
developed cases of it in
lower animals, by the
introduction of the mem-
brane into their trachea.
It is more apt to be
transmitted while the mem-
branous exudations are
present; [illegible]
more certain at what
time [illegible]
is infectious, communicant
[illegible]

had been free from Mem-
brane for two (2) or three (3)
weeks, have seemed occasion-
ly to give the disease to
[illegible]
[illegible]
[illegible] in some, the
Membrane [illegible]
[illegible]
[illegible]
posed to it, while in others
it does not show itself
for [illegible],
it [illegible]
between these two extremes,
[illegible] (4) or five (5) days, is
most usual time,

temperature [illegible]
a characteristic symptom
[illegible] it seldom gets [illegible]
high, soon after this the
whitish membrane or exuda-
tion makes its appearance
The course here again
varies in [illegible]
the febrile symptoms may
subside, and he may go
on to rapid recovery, while
in [illegible]
[illegible] extend rapidly, may
go so far as to attack the
Eyes. forming on [illegible]
[illegible] or [illegible]
destruction of Sclerotic

again [illegible]
Ears or mouth [illegible]
Urethra [illegible]
may attack oesophagus and
so as far [illegible] as stomach
This membrane adapts
itself accurately to surface
on which it is formed
thus when it [illegible]
chial tubes it will form
casts of them, and [illegible]
it does attack bronchi it
is apt to extend to small
ramifications. It is mainly
in this class [illegible]
that Lobular Pneumonia
is set up, and in this

[illegible]
[illegible] in [illegible]
[illegible]
over large surf[illegible]
the patient becom[illegible]
extremely weak and anae-
mic, and may die in
a fainting fit; brought
on by slightest exertion,
[illegible]
cence [illegible] not com-
mence for two (2) or three (3)
weeks or perhaps even
longer than this. The
breath [illegible]
more especially in adults,
not from actual [illegible]

although it may take on
this complication, but from
[illegible]
brane, Diphtheria [illegible]
a constitutional [illegible]
of which this mem[illegible]
[illegible] Manifest[illegible]
[illegible] of the organ
[illegible] some special,
[illegible] od become [illegible]
[illegible]
granular and [illegible]
[illegible] may be form[illegible]
Endocarditis set up; the
Lungs become [illegible]
followed by necessary [illegible]
[illegible]

enlarged, hyperaemic [illegible]
[illegible], Kidneys congested
and [illegible]
albumen and Hyaline Casts are
usually to be found in the
urine - [illegible]
[illegible]
permanent trouble - Muscles
degenerate and may be-
come atrophied to very con-
siderable extent. Glands
[illegible]
[illegible]hood of place where
membrane is being formed
are [illegible] may [illegible]
[illegible]
[illegible]

and their vess[illegible] in
congestion to some [illegible]
If there be a wounded
or ulcerated surface the
membrane is apt [illegible]
ning over it; many cas
are reported from [illegible]
where operations were performed
and cases of Diphtheria [illegible]
either in the wards, or
would be brought in soon
afterwards, and the patients
on whom the operations
were performed would con
tract the disease, and
the membrane would first
make its appearance [illegible]

on the wounded surface. No matter where [illegible] brane first makes its appearance, the local symptoms are the same [illegible] ness more or less [illegible] [illegible] brane is apt to show itself later on in the throat. Diphtheria takes on several [illegible] [illegible] cipally due to difference of [illegible] part affected, as [illegible] helium, more or [illegible] [illegible] [illegible] [illegible]

it attacks the mucous membrane of nose more apt to prove fatal on account of close proximity of [illegible] vessels to surface and great number of [illegible] that are found in Schneiderian membrane, the [illegible] is more apt to be absorbed into the system and cause [illegible], when it [illegible] tends to air passages also apt to prove fatal [illegible] membrane [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] patient [illegible] [illegible] of [illegible].

deeper tissues of the neck and this is an essential feature of the so called "Malignant variety" and if glands at angle of jaw become swollen, considered by some writers to be a grave sign.

The Primary Symptoms do not indicate the malignancy of the case, the so called Malignant cases often coming on with no more severe symptoms than those of the very mildest

on many cases after convalescence has commenced symptoms will appear entirely different from any of the preceding, and are for the most [illegible], the Soft Palate is usually the first to be involved, and the patient will speak with a nasal twang, if he attempts to swallow a liquid it will regurgitate through his nose, The Paralysis may stop here but it usually goes on farther, the ciliary muscles will be the next

[illegible] lows, it then goes to the upper and lower extremities causing partial loss of motion and a [illegible] of numbness, although these these Paralysis [illegible] cause much alarm, they are generally [illegible] of [illegible] in the [illegible] or [illegible] they are not always free from danger, as they may extend to intercostal muscles and diaphragm and thus may interfere suf-

[illegible] with Respiration
as to cause death, or may
involve heart-muscle and
thus impede or even stop
the circulation.

The Prognosis depends
on the case and also
considerably on the charac-
ter of the epidemic, as
in some epidemics it
is much more fatal than
in others [illegible]
[illegible] much more dangerous in
case from which it was
contracted [illegible]
the most malignant cases
are caught from those

of very mild form.
Prognosis is generally favorable when only small surface is covered by the membrane, while on other hand if surface be large and there is glandular swelling, especially if this swelling arises suddenly is a very bad sign, and calls for [illegible] caution.
It is liable to [illegible] in those who have once had it; but is generally of milder form. Every complication adds to the danger, and if [illegible]

[illegible]
unfavorably. Every
[illegible] be treated on [illegible]
[illegible], If fever should
[illegible]
[illegible]
[illegible]
[illegible] symptoms as [illegible]
should be checked
speedily as possible
The nourishment is
of great importance, and
should not be overlooked,
and great care should
be taken not to give
any remedies that will
derange the digestive

be when [illegible] [illegible]

over the [illegible] [illegible]

with [illegible] must [illegible]

Ice to swallow do great-

good in some cases, and

are very much relished

by the patient, but it

should be remembered

that [illegible] [illegible] [illegible]

food very freely, and

when temperature is

low (it cold) should never

be used, except in [illegible]

of very small [illegible]

and it should [illegible]

be stopped as soon as

convalescence commences

If [illegible] has [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] should
be used and not [illegible]
into trachea, [illegible]
removal of membrane
should never be done,
nor should strong caustics
or the mineral acids, [because] as
they cause ulceration and
thus give the system
become a better chance
of being absorbed, [illegible]
Some cases Diphtheria
assumes a Croupous
form, it will often be
found necessary to

give an emetic, as
Turpeth's Mineral, Sulphate
of Zinc &c. [illegible]
[illegible]
much [illegible]
and give them in large
quantity and repeat often.
We have in Tr of Chloride
[illegible] our best
agents and it should
be given in large doses
as 25 - 30 gtts, every three
(3) or four (4) hours.
As a [illegible] resort, Trach
otomy may be performed
but it is seldom [illegible]
by much success, as
Membrane

[illegible] to form below
the opening. The treat-
ment after the operation
is about the same as
before, with the exception
of attending to the wound.
The wound should be
disinfected and stitches
applied so as to hold the
canula in place, [illegible]
later on the wound
shows [illegible] any signs
of membrane forming
or an appearance of erysip-
elas, the stitches should
be removed, and the
wound treated with pur

Carbolic Acid and Glycer-
ine the larynx swabb-
ed as far down as possible
by a spray thrown through
the tube or by means of
a feather or probang
dipped in Antiseptic
Solution and passed
into it; If fever set-
in and there is a
disproportion between pulse
and respiration, which
is characteristic of inflamm-
atory trouble, there will
be a complication of Pneu-
monia or Emphysema
and in such cases large

[illegible]

be given, Also give

[illegible]

[illegible]

[illegible]

patient, and [illegible]

be taken to upper part

of the house [illegible]

Everything such as

[illegible]

bedding and all the

utensils used in the

sick room should

carefully be disinfected.

On Intermittent Fever

Some diseases acquire a great deal of notoriety because they are exceedingly fatal, and others have acquired a most unfavourable notoriety on account of their great fatality; others still, of which intermittent fever is one, are interesting because they are so exceedingly common and because the structural changes which they immediately or remotely produce occasion so many deaths. A large part of the globe is subject to the action of the malarial poison. The trouble caused by malarial poisoning has long been recognized. In fact since rain began to fall, moisture to collect and swamps to form it has stood in the first rank as a cause of death. But for many centuries no reasonable theory was formulated as to the essence of the poison or its mode of action

The great Italian physician Lancisi in 1605 published a book setting forth distinct ideas on the subject of malaria. Since his day numerous patient tireless investigators have studied the subject and many of them have fondly fancied that they had discovered the materies morbi of the disease. But each of these supposed discoveries has in turn found its way into the waste basket [illegible] for undeniable pathological [illegible]. Exception must be made in favor of the supposed [illegible] discoveries of the malarial [illegible] [illegible] [illegible] [illegible] is yet to be decided.

But while we know so little of the essence of the poison with many phenomena connected with its growth and its effect upon the system we are perfectly familiar. That the poison may develop a mean summer temperature of about 60° F is

necessary. It develops as far north as 53° and south as 57 the world over wherever conditions favoring it are found. In our country from Boston to Galveston and throughout the great central valley of the continent its influence is felt and feared. Along the valley of the Mississippi its ravages are only second to those of Yellow Fever. That the poison may develop the following [illegible], [illegible] and [illegible] conditions must combine. There must be a certain degree of warmth, a vegetable matter for decomposition and moisture upon or near the surface of the soil. A soil that has been subject to an overflow and from which the waters have disappeared is an especially good situation for its growth. And the more intense the heat and rapid the drying the greater the quantity and virulence of the poison

There are many objections to the probability of the 2nd of these conditions. [illegible] instances of malarial poisoning that have occurred in regions void of vegetation. But in these [illegible] microscopic revelations in [illegible] that vegetation is absent until the rocks & ground have been examined microscopically for the existence of these vegetable [illegible] that so often flourish unsuspected by the naked eye. And this probably in such cases has rarely been done.

The condition in nature in which the conditions favoring the growth of the poison are best combined are the swamps of our low countries.

But all swamps are not thus infamous. The great Dismal swamp of Va & N.C. is not a malaria producing region. The poison of malaria is [illegible] closely [illegible]

negro. He seems to enjoy a wonderful immunity. [illegible] breathes the [illegible] from the swamps and rice fields of the coast with impunity, and thrives and fattens under its hottest sun, as much as does his master as he enjoys the cool breezes and pure air of the piedmont region [illegible]. All classes are liable to malarial infection but all are not equally liable. The extremes of life [illegible] as subject as those in middle life, men are more frequently attacked than women and this as we shall see because more exposed to the poison.

By constantly living in a malarious region one becomes accustomed to its influence and is not so readily seized by a paroxysm as one who has recently come into such a region. But while the regular inhabitant is not so readily seized by a paroxysm the continuous action of the

poison during its impress upon the nervous com-
plexions of [illegible] [illegible] [illegible] bet-
mid fever and several physical and mental
exertions. Any influence that tends to pro-
duce a debilitated state of the system invites de-
velopment of a paroxysm of disease. But the great
predisposing cause is the previous occurrence of a
paroxysm. Once the subject of malarial poison-
ing, one will long remain liable to the develop-ment
of paroxysms though in the mean time he en-
tirely change his habitation. [illegible]
malaria is most active during the night. This fact
is known to all dwellers in malarious regions, and
the comparative immunity of those taking advantage
of by many who while working by day in its zone
betake themselves to the hills to sleep. And the legit-
imate deduction from this for those who are com

fitted to remain constantly exposed in its habit-
ing [illegible] [illegible]. Cultivation and drainage are
destructive to malaria. By drainage and cultiva-
tion vast tracts of [illegible] [illegible]
ter and unhealthy have been reclaimed and made
suitable for the home of man. The poison lives
the [illegible]. [illegible], on the hilltops and
mountains being continually free from the [illegible]
The maximum elevation of the [illegible] [illegible]
ing [illegible]. The poison is also movable by the wind
If then a mountain is to leeward side of a malari-
ous region such a [illegible] wind [illegible]
for months towards it the poison was gradually
blown up the mountain to a height exceeding 9000
feet. The poison is soluble in water and the
passage of it [illegible]
well under the [illegible] [illegible] and [illegible]

or a growth of trees between them and the infectious spot. Having said thus much of the [illegible] of the poison it is time to consider the phenomena that follow its introduction into the organism. When one has been attacked by the poison he will have either what is known as intermittent or remittent fever. And the type of the attack will depend on the intensity [illegible] poison or the susceptibility of the individual. An intermittent fever is a malady the result of malarious poisoning characterized by the recurrence of a cold, hot, & sweating stage, an intermission free from all trouble and a tendency to recurrence at a time dependent on the type of the disease. In remittent fever there is at no time an absence of fever only remissions and exacerbations, more or less well defined.

Pathology Until recently [illegible]

[illegible] in [illegible]

[illegible]

[illegible] cases [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] enlarged. [illegible]

[illegible]gement is a loss of [illegible] motor [illegible]

followed by engorgement and th[illegible]

[illegible] of engorgement [illegible]

ment consisting in hyperplasia [illegible]

[illegible] and by hypertrophy of the [illegible]

condition known as ague cake [illegible]

of intermittent fever [illegible]

cold [illegible] and a sweating stage. [illegible]

[illegible] of the [illegible]

[illegible]

increase [illegible] the face neck and whole body is covered by a drenching sweat. The [illegible] period is replaced by a condition of coolness and weakness [illegible]

is on there is a considerable amount of [illegible] instead of [illegible]

[illegible] in the [illegible]

and [illegible]

[illegible] condition [illegible]

time for next paroxysm when the same [illegible] the same [illegible]

[illegible]

such as all of physicians daily see. In the South [illegible] Atlantic states the Gulf states and the Mississippi [illegible] the poison is developed in [illegible] and another [illegible] known in medical [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

whether or not [illegible]

symptoms. Pernicious symptoms [illegible]

[illegible]

[illegible]

When suddenly there will occur symptoms of profound heart failure. The pulse will become exceedingly feeble [illegible] be cold & clamming the [illegible] [illegible] progressive heart failure [illegible] remaining conscious to [illegible] the end [illegible] cases there will be vomiting and purging absolutely uncontrollable as an attack of [illegible] [illegible] the [illegible] [illegible] [illegible]

[illegible]

[illegible] the [illegible]

nation of the blood [illegible]

Prognosis. In simple acute intermittent the prognosis is good. In chronic poisoning a cure will require long and patient effort. In pernicious type if patient be seen in first paroxysm and active treatment be instituted promptly prognosis is good but if not seen until the occurrence of the second or third paroxysm it is very [illegible]

<u>Treatment.</u> Multiform [illegible] the remedies [illegible] proposed for the cure of intermittents. The [illegible] of many of them have been vaunted as specifics but one by one most of them have been relegated to the limbo of last years birds nests and nostrums. As the disease is very common we need a remedy which while efficient shall be cheap

or cinchonism may be maintained anthough the intermission. In case the necessity of the case is urgent it is not essential to wait [illegible] the [illegible] of the fever or some [illegible] [illegible]. Quinine may be given as soon as [illegible] diagnosis is made. Indeed in some cases viz the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] in this condition to give in 10 grain doses [illegible] [illegible] [illegible] with [illegible] [illegible] [illegible] [illegible] [illegible] must [illegible] given and stock dose upon dose [illegible] the [illegible] cinchonism [illegible] the [illegible] [illegible] the patient [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] with [illegible] [illegible] [illegible] acid [illegible] [illegible] [illegible] [illegible]pension in water. Sugar coated pills are good when fresh. When [illegible] [illegible] [illegible]

[illegible] conde-

tion and especially if prompt action is de-

sired by hypodermic injection. And the or-

[illegible] sulphide in solution in acidulated

water may be used [illegible]

[illegible]

as solution the hydrobromate [illegible]

sulphate or the [illegible]

ian carbamidate. [illegible]

[illegible]

[illegible]

[illegible]

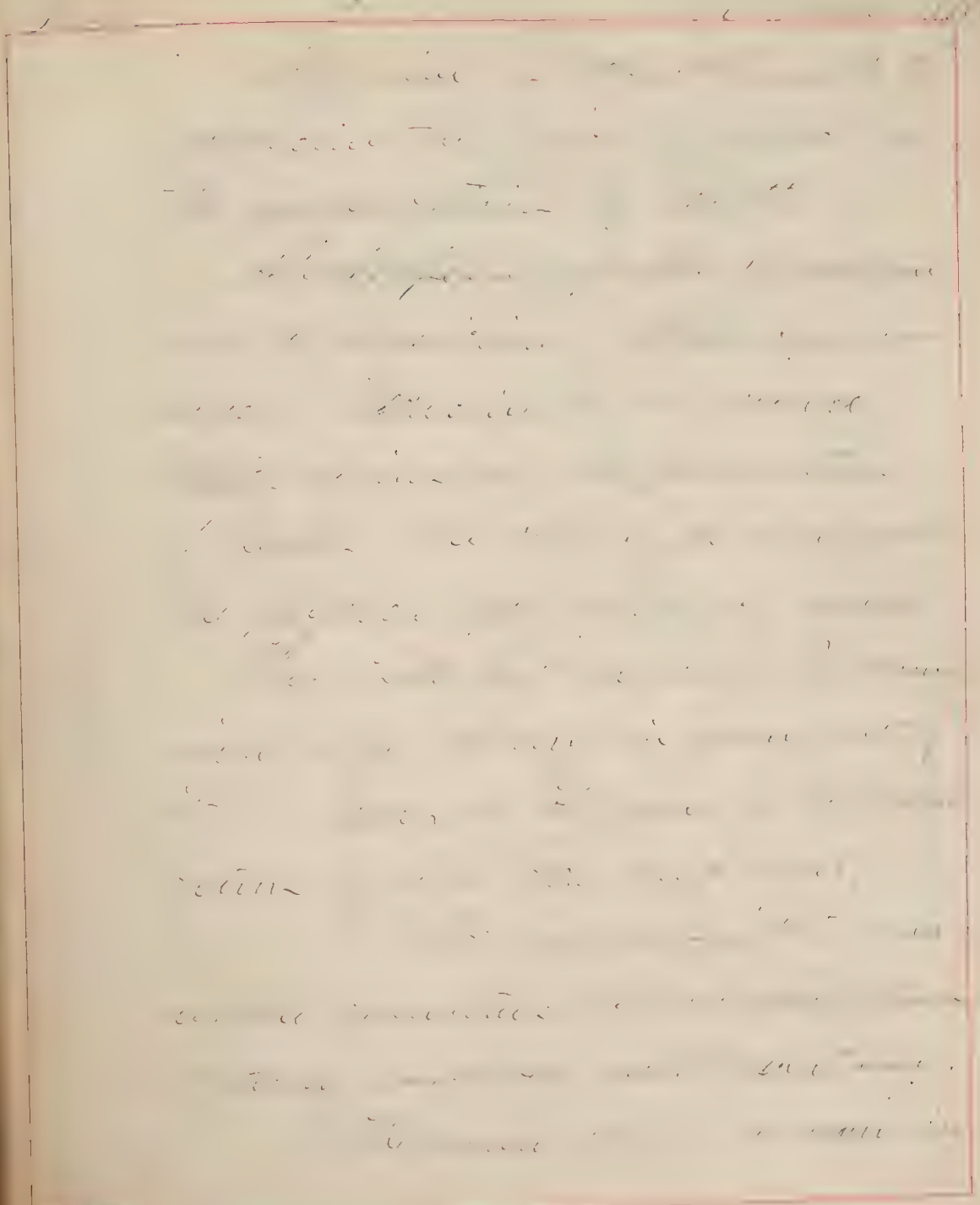
[illegible] is inadmissible [illegible]

Iodine and carbolic acid [illegible]

[illegible]

all the [illegible]

have been used with [illegible]



[illegible]

after he has [illegible] in [illegible]ical [illegible]

[illegible]

as in taking some physical or mental exercise, and the system seems satisfied immediately after it as it does after a regular meal. And of course regular meals are one of the golden rules of hygiene.

[illegible]

[illegible] the [illegible]
[illegible] medicine is [illegible]
a [illegible] rule, [illegible] the
proper amount [illegible]
times [illegible] is [illegible]
[illegible] times of life [illegible]
the [illegible] the [illegible]
[illegible] air [illegible] out of
doors [illegible] important, [illegible]
ventilation no draught but plenty
of fresh air all the time and
give plenty room for the effete
to escape, especially is this true
in young people, they [illegible]
have the power to withstand [illegible]
much as older ones.

As a general rule a child

earth, even if hands and forehead
knees and feet do take some turn,
from her surface and garment
[illegible]

sit-down and study [illegible]
any one day. The [illegible]
[illegible] since there is no word more
[illegible] and [illegible] the [illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
and [illegible]. [illegible]
[illegible]
than one [illegible] such as he can
build to which he already has attained,
and indeed this is as much as
our greatest philosophers had when
[illegible] twenty.

much higher attainments [illegible]
practiced. The human mind
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
professions. They never understood
what hygienic regime for good
health as regular sleep, [illegible]
habits of exercise and regulated
study, [illegible]

[illegible]

[illegible]

They [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

of intemperance [illegible]

[illegible] violation [illegible]

all beverages such as alcohol beer

whiskies and wines should be strict-

ly prohibited. These same rules

[illegible] be [illegible] when she

is in the prime of life, and when

married though she is not the bread

winner she is the central figure of

the domestic circle. [illegible] health [illegible] and physical well being are not [illegible] for others even for generations unknown.

"Every [illegible] physician at forty." At the age of forty a man should be settled in mind body and in business; he should of course be married for immoral people of the unmarried especially are enemies of the human race. In the voyage of life our well preserved man of forty may move on so equally in health [illegible] that for 10 years there may not be wear and tear enough to cause appreciable deterioration [illegible]

and calmly as if the [illegible]
ed to time. [illegible]
takes the active [illegible]
[illegible] man but studies [illegible]
[illegible] for his particular weak-
[illegible] body. It is [illegible]
time that the man is [illegible]
[illegible] the same, [illegible]
wrought a level height [illegible]
the causes gravely which he [illegible]
them. An old man has [illegible]
less provision of vital [illegible]
less capacity for [illegible],

If he lived with [illegible]
[illegible] this provision [illegible]
soon be exhausted and [illegible]
would soon be the [illegible].

Lobar Pneumonia.

Lobar Pneumonia. Synonyms, Croupous Pneumonia; Pneumonitis; fibrino-pneumonia; lung fever; winter fever.

Definition. An acute inflammation involving the secretory structure of the lungs with a fibrinous exudation rendering the alveoli impervious to air; characterized by a sever chill, fever, pain, dyspnea, cough, rusty sputum and great prostration

Aetiology. It has been a subject of much discussion, either a local or Constitutional disease. Inhalations of irritants will not bring on the disease, Cold and wet weather do not seem

it & Small amount of lung
may be involved and great Con-
stitutional disturbance be set up;
on the other hand a large portion
of the lung involved and but
slight Constitutional disturbance.
Most every Case is ushered in
by a Chill like the Constitutional
diseases, also Crisis, nervous Symp-
toms, Coma, and Convulsions
which characterize Constitutional
diseases are found in Pneumonia;
As we have said before Cold and
wet weather have an appreciable
effect in the pneumonia-rate
It is found more frequent in
the Southern States than in the
Northern States almost entirely
unknown in the Polar regions.

[illegible] seems to be no exciting cause

The Predisposing Causes, are those who are addicted to the undue use of Alcohol. More frequent in the first two years of Childhood than the succeeding eighteen years. But is found most frequently between the ages of twenty and forty. Old age is a predisposing cause and is mostly fatal when it attacks persons over sixty years of age. It is said that nine tenths of all old people that die of acute diseases above sixty five, die of Pneumonia. Attacks the male oftener than the female, about three to one.

Morbid Anatomy, Anatomically

+

well as clinically there are three recognized stages in Lobar Pneumonia

I Stage of engorgement or Congestion

II Stage of red hepatization.

III Stage of gray hepatization, resolution or purulent infiltration The stage of resolution and purulent infiltration may be called the fourth stage apart from the third stage.

1st stage, Hyperaemia or engorgement consists in the vessels of the alveoli being distended to their utmost, encroaching upon the cavity of the air vesicle.

If a piece of lung be cut off it will float as it contains some air,

[illegible]

at once then where [illegible]

[illegible] and its elasticity is destroyed.
When Cut into, the Color densly [illegible]
examination [illegible] Closely re-
sembles the Cut surface of a
section of the liver.
The air is Completely driven out
and the lung is heavy, and the
exudation of solid fibrin which
gives a lumpy appearance
[illegible]tion. In this stage the in-
flammation passes to the inter-
stitial tissue & the alveoli are
crowded with fibrin called lobar
pneumonia.
The third stage, is of gray hepatiz-
ation, there is not much difference
between the first of this stage and
the second stage. The lung is

[illegible]tled in Color, Surface [illegible]

[illegible] in granular appearance;
[illegible] smoother with the Lung be-
comes gray in Color yields to pres-
sure. The Lung Consists of a pulpy
liquid mass; fatty degeneration
takes place in the alveoli; & that
liquid will flow out so the
alveoli are filled with a semi-
fluid made of blood corpuscles
pus corpuscles, and [illegible].
If this stage passes into resolution
this matter is partly absorbed and
partly expectorated the alveoli lose
their contents and [illegible]
the third stage may pass into
purulent infiltration which may
terminate in resolution.
Lobar Pneumonia may pass

ing either of the following con-
ditions
1 resolution. 2 Purulent infiltration,
3 Abscess 4 Gangrene 5 Chronic
interstitial pneumonia. In res-
olution the blood vessels regain
their integrity; matter is absorbed
and expectorated and dispersed
into the alveoli. In infiltration
the matter is diffused through the
tissues and the whole lung is
infiltrated. Patient often dies
of apnoea. When abscess follows
walls give way and many alveoli
are made one, this condition is
very rare. In gangrene [illegible]
and breaking down lung
tissue fortunately this condition
is very rare [illegible] alcoholic habits

in the [illegible] Consumption [illegible] of
lung tissue, catarrh, pleurisy and
dilated heart.
Phthisis is chronic interstitial
pneumonia which is characterized
by inflammation of the interstitial
tissue of the lung, enlarging and
obliterating some of the air cells
in the first stage the lung is
much distended and enlarged,
then contracts the lung being
then becoming only one fourth
its natural size. This condition
however is rare.
The most frequent seat of pneumon-
ia, as follows: first right lower
lobe; second, left lower lobe;
third right upper lobe; last of
all the right middle lobe

[illegible]
simultaneously [illegible] bilateral forms usually found in old persons.
Duration of different stages vary. The Congested stage generally lasts from one to three days. Stage of Consolidation from [illegible] to seven days. Stage of resolution from one to three weeks. If the lung is engorged it will generally pass through all the stages yet in a very few cases may be aborted.
Symptoms. [illegible] with a severe chill more severe and prolonged than any other disease excepting intermittent fever and pyaemia [illegible] these diseases can be excluded. It is further evident [illegible] the chill

of pneumonia, in children often
convulsions). The chill is followed
by a rapid rise of temperature
(103°–105°) a strong full but rapid
pulse, a dull heavy pain
aggravated by pressure if there
associated with pleurisy. Shortness
of breath, respirations from
40 to 60, Pulse from 90 to 120.
Dyspnoea sometimes but not
always present; it does not
depend on the amount of lung
involved. Cough short and
hacking, more constant in
children. Thick tenacious mucous is
expectorated in the first stage;
will [illegible] seem out of an inflamed
vessel, frothy [illegible] becom-
ing semitransparent [illegible] [illegible]

Changes in the second stage the
sputa is of a "brick dust" or rusty
hue, due to the mucous and blood
being thoroughly mixed, The
brick dust sputa is a pathogno-
monic sign of Pneumonia The
prune juice sputa belongs to the
advanced stage and is a
grave augury. In the stage of
resolution the sputa becomes
more fluid and is brought up
easier, of a yellowish and muco-
purulent in character. Including
very often there is no expectoration.
When it suddenly ceases in the
disease, it is a bad omen.
The urine is scanty, [illegible]
diminished and gives rise to
a brick dust deposit.

[illegible]

and evening exacerbations. The maximum temperature is about the third day going on to the seventh day then the crisis. If the temperature goes to 107° will terminate fatally. The crisis may come between the 5th and 7th day from the initial chill. This should be watched for death may occur from heart failure. If the temperature goes down gradually this is called lysis. Crisis is the most common of the two. The temperature is apt to be higher than at the apex. If high temperature keeps up it is caused by purulent infiltration. If an alcoholic subject delirium

will occur. Typhoid [illegible]

[illegible] three. Then the patient is adynamic. It has nothing in connection with typhoid fever it is simply a pneumonia with extreme prostration.

Physical Signs. Inspection. In the first stage deficient movement of the affected side due to pain in the second stage the healthy side rise normally, the affected side lagging behind. If both lungs are inflammed to any the dia-phragm cannot descend and the epigastrium does not [illegible] during inspiration; the breathing being conducted by the upper part of the chest.

Palpation. In the first stage

increased vocal fremitus. In the second stage vocal fremitus is markedly increased. Direct the patient to say "99" and there will be a marked increase of thrill

Percussion. In the first stage, the percussion note is slightly impaired at times; at times having a hollow or tympanitic quality. In the second stage, dulness over the affected part, with an increased sense of resistance

Auscultation. In the first stage, over the affected part fuble vesicular murmur then a crackling sound, the vesicular walls falling together, and separating during inspiration giving a crackling

sound likened to the crackling
of salt when thrown into the fire,
this sound is known as the
crepitant rale, in the second
stage high pitched bronchial
breathing, tubal breathing resemb-
ling to and fro metallic sound
except in those cases in
which the bronchi are more or
less filled with secretions.
Bronchophony or distinctly trans-
mitted voice, at times pectoriloquy
or distinct transmission of
articulate sounds due to forma-
tion of a cavity. In the third
stage all these signs diminish.
The crepitant rale returns which
has been absent in the second
stage (Crepitatio redux). [illegible]

eruption occurs on the [illegible]

sounds are associated with fine and small moist bubbling rales. Terminations of all the signs and symptoms are favorable, recovery will generally take place within two weeks, when purulent infiltration supervenes the disease pursues a tedious course of several weeks duration, with a [illegible] exhausting fever. If death occurs in the second stage it is usually the result of a collateral oedema of the [illegible] and lung, or cardiac in[illegible]. Death in the third stage result of exhaustion it is especially [illegible] in the weak aged or drunkards. If abscess occur there are exhausting sweats, frequent cough with a large

[illegible]

tions blood-stained expectorations. Gangrene is a rare termination. It is associated with symptoms of collapse; the expectoration is black and fetid, and the physical signs of a pulmonary cavity.

Diagnosis. Pneumonia may be confounded with either of the following complaints: Pulmonary Oedema; Capillary bronchitis; Lobular Pneumonia; Typhoid fever; Pleurisy; Pneumonia. Pulmonary Oedema is a passive condition arising from Bright's disease [illegible] Chill, rise of temperature [illegible]

[illegible]

[illegible] its [illegible]. Diagnosis from

Lobular Pneumonia [illegible] in Children. It is generally preceded by a bronchitis [illegible] occurring in spots. Pneumonia [illegible] in Children and [illegible] Pulse and [illegible] temperature. Typhoid fever enlarged spleen; [illegible] in the ileo-caecal [illegible].

Prognosis. depends on the extent of the inflammation. Double pneumonia being dangerous. Temperature 105° and pulse 120 are of bad omen. Pneumonia of drunkards almost invariably terminates fatally. Typhoid pneumonia; [illegible] [illegible] of the lungs,

in the Cardiac [illegible] alco-
hol e Stimulants. Scientifically [illegible] of
brandy [illegible] the lungs [illegible] the [illegible]
of the face is flushed and the weakness
persists, stop the alcohol. Never use it
in the first stage. When the second
stage is well set in increase the dose
to ℥ss every half hour. When the crisis
comes look for cardiac failure.
Every other symptom may be favor-
able and the heart will fail [illegible]
stimulants [illegible] sets in, the
brandy will stop it. Ammonia [illegible]
may be use with the brandy. If the
kidneys are not acting well give
digitalis. In the third stage if
there is no coma morphia
may be given. If the third stage
[illegible] and the products of the

Intermittent Fever.

This affection is one of the [illegible] [illegible] of [illegible] dis.[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] periodic dis.; which same is characteristic of the dis.

Etiology.

This [illegible] [illegible] [illegible] [illegible] [illegible] as malaria; the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] the dis. [illegible]. Its [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] it is controlled by remedies having a specific power of this dis.

[illegible] [illegible] to pathology, "as [illegible] [illegible] [illegible] [illegible]" [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] the [illegible], [illegible]
of this city, [illegible]
the blood of patients who are suffering
in this locality, a microscopic
germ, malarial bacillus, found in
no other site.
The production of this germ is
attributed to vegetable decomposi-
-tion.

Observation has shown it
[illegible] generated in marshy, [illegible]
localities, or [illegible]
existing for any length of time
even in dried localities.

Its evolution
is prevented in a temp. of 32° Fah.
It is most [illegible]

Liver the Spleen.

Clinical history.

This embraces an account of the symptoms, [illegible].

In a majority of cases, the attack [illegible] sudden. In others, however, [illegible]

[illegible]

Malaise.

Although not definite, [illegible] sometimes leads the patient to anticipate the attack, [illegible]

[illegible]

[illegible]

[illegible] the sweating stage; each of which are distinctive [illegible].

silent sighs. Pulse small, and accelerated; countenance has an anxious express.
Face, pale, or livid; tremul. of body & extremities extreme cold.
Circulation, sometimes completely suspended in extremities.
Mental irritability, oppression, or despondency; exhilaration seldom present.
Duration of stage, from one half to three hours.
Transition to hot stage, usually gradual; flushing of head is felt; sensation of warmness, febrile symptoms developed & cold stage is ended.

Cold Stage sometimes wanting, and Paroxysm begins without Chill. Congestion of internal organs takes place in this Stage, owing to imperfect capillary circulation, though the amount of blood is not diminished.

This morbid condition caused from contracted peripheral vessels, from lack of the Stimuli hence congestion.

Cold Stage is not the exciting cause of the other stages; as begins at times, even yet; [illegible] or has even, when this stage is wanting.

Hot-Stage.

This is characterized by extreme movement. Skin becomes hot, pulse quick, full, and bounding; face flushed, & pulsating in temples. Thermometer in Axilla, indicating temp. from 105°-106° Far.

Thirst-prominent symptom. Intensity of fever varying in dif. individuals.

Duration of Hot-stage from Two to Eight Hrs. Hallucination & persistent Headache in this Stage.

Sweating Stage.

Perspiration appears on face & neck, and extremities; Fever gradually

?

between paroxysms.

The period from the beginning of one, to the beginning of the other paroxysm, is the interval; the intermission, being the time elapsing from the end of one to the beginning of the next paroxysm; duration of the interval, being the basis on which the disease is divided into its varieties.

e.g. Quotidian, Tertian, and Quartan;

In Quotidian type, interval, each time [illegible] the patient having a single paroxysm [illegible].

In Tertian type, interval each time eight hours, paroxysm, recurring on alternate days.

In Quartan type.

Natural history of the Quartan type. A quartan fever—having paroxysm every fourth day; two days intervening between paroxysms.

As a rule, paroxysms are uniform in each individual type.

Quotidian, & Tertian types, are the most common.

Cases sometimes exist in which one of the simple types are duplicated. That is, two sets of paroxysms coexist.

[illegible] is a double Quotidian, two paroxysms occurring daily; In double Tertian, a paroxysm occurring daily; the

paroxysm occurring at dif. hrs on alternate days.

A Tertian, is dupli-cated, when two paroxysms occur on the same day.

The double Quartan is a paroxysm occurs two successive days; on third day, there is no paroxysm; finally, Triple Quartan, the paroxysm occurs on three suc. days; the paroxysm presenting on each day, suitable points of dis-tinction one of which, corresponding with that occurring on fourth day.

These may occur at any hr. of the day: rarely at night.

The Tertian and Quotidian, recur in forenoon in majority of cases; symptoms as a rule, returning same time each day.

This at times varies, when earlier they are said to be anticipating; when later, retarding.

During Intermission, cases vary some; marked debility others, digestion and appetite good. Anemia, is a complication in long standing cases.

Pallor of face, with sallow tint and Oedema, at times apparent.

Digestion, at times [illegible].

Prognosis.

Good; except in [illegible] intermittent, as against [illegible] [illegible] instances.

Simple Quotidian without [illegible] cures easily. Many changes [illegible] [illegible] in Gouty, [illegible] [illegible] incurable.

If protracted, its effects will be, Anaemia, Enlarged Spleen & Anasarca.

Treatment.

For the cure of any Malarial, Continued [illegible] Specifics in this case, if any.

The salts of Quinia, of which the Sulf. is preferred, will answer.

of fervent, in drumming of [illegible]
[illegible], in [illegible];
[illegible] [illegible], [illegible]
[illegible].

The [illegible] effects of this dis-
ease are [illegible], at its [illegible].
The liabilities to a relapse are
diminished.

Preparatory treatment
is unnecessary in this dis-
ease; Administration of Remedies
should begin, as soon as
a positive diagnosis can be made;
this is most Effective, when following
immediately after a paroxysm;
allowing as much time as possible
for the specific effect of the Remedies.

Dose.

Give Remedies in sufficient doses, to avoid Convulsion, as a result; This may be readily accomplished, by administering from 5-10 at a dose; Or by giving 4 gr. doses, at short intervals, from three to four [illegible].

After the danger has abated, continue the Remedy, in 4 gr. doses, for eight, or ten days, as the disease is liable to recur, at the expiration [illegible] full [illegible] or [illegible] anticipate, occurrence,

The Remedies may be administered in powder

ill, or Solution.

If not indicated by the Stomach, administer by Hypodermic Injection, or Enemata.

In Enemata, administer larger doses; In Hypodermic, always administer in smaller doses than by the mouth.

By Injection, Hypodermically, [illegible] is that, as the [illegible] in Solution is more stronger than by the Stomach. Effects being more rapid, and more [illegible]; [illegible] this should be used always in Extreme cases.

If Anemia exist, a chalybeate should

to mark.

There are several succedanea of Quinine, which will arrest the dis.

Salacine, during intermission, in doses of from grs. XII.–XX.

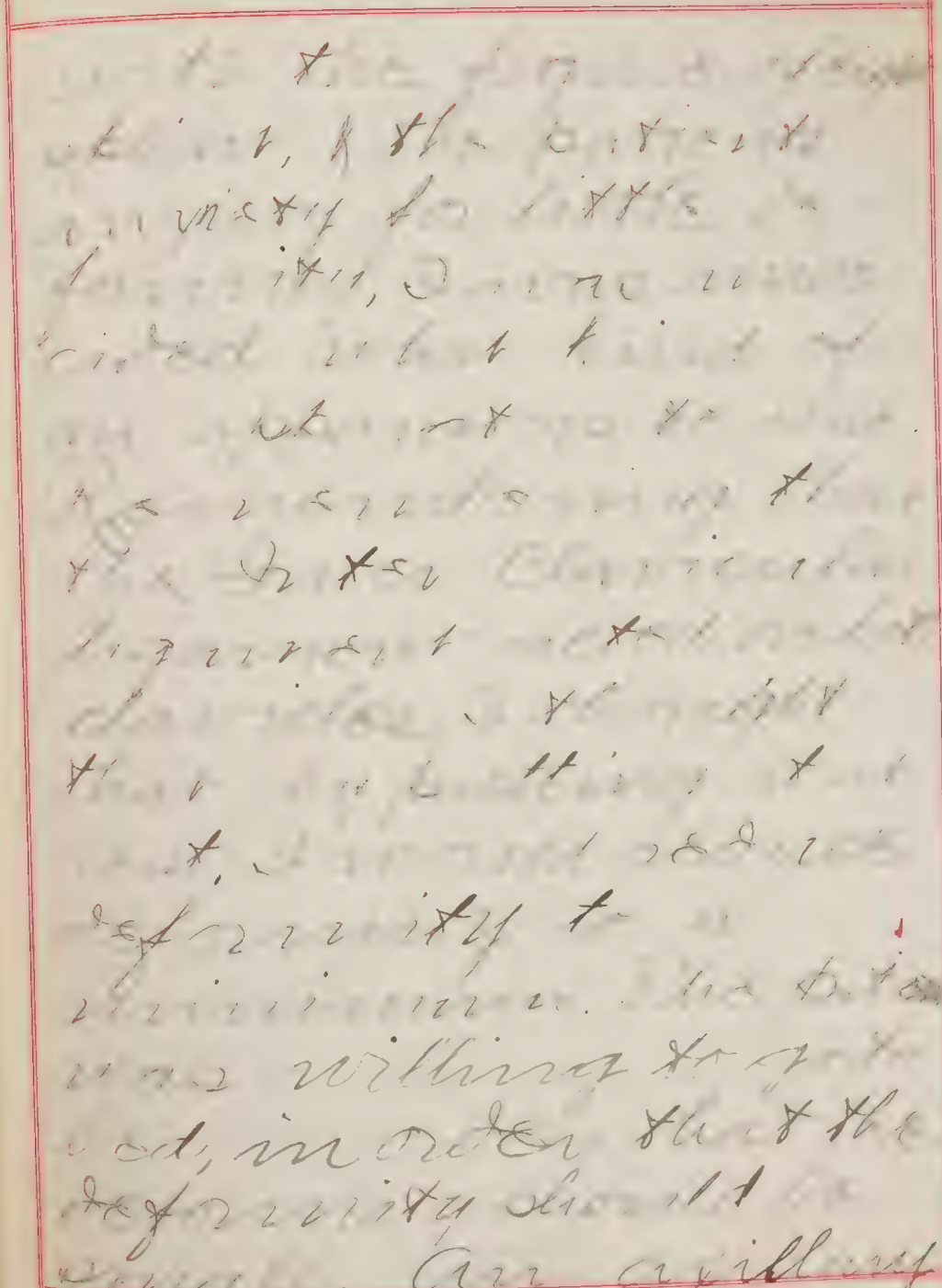
Sulf. Berberine, in doses from grs. XI–XII during intermission.

Arsenic, is next to Quinine in reliability. Fowler's Solution (should begin, in XII drops doses Tri daily.

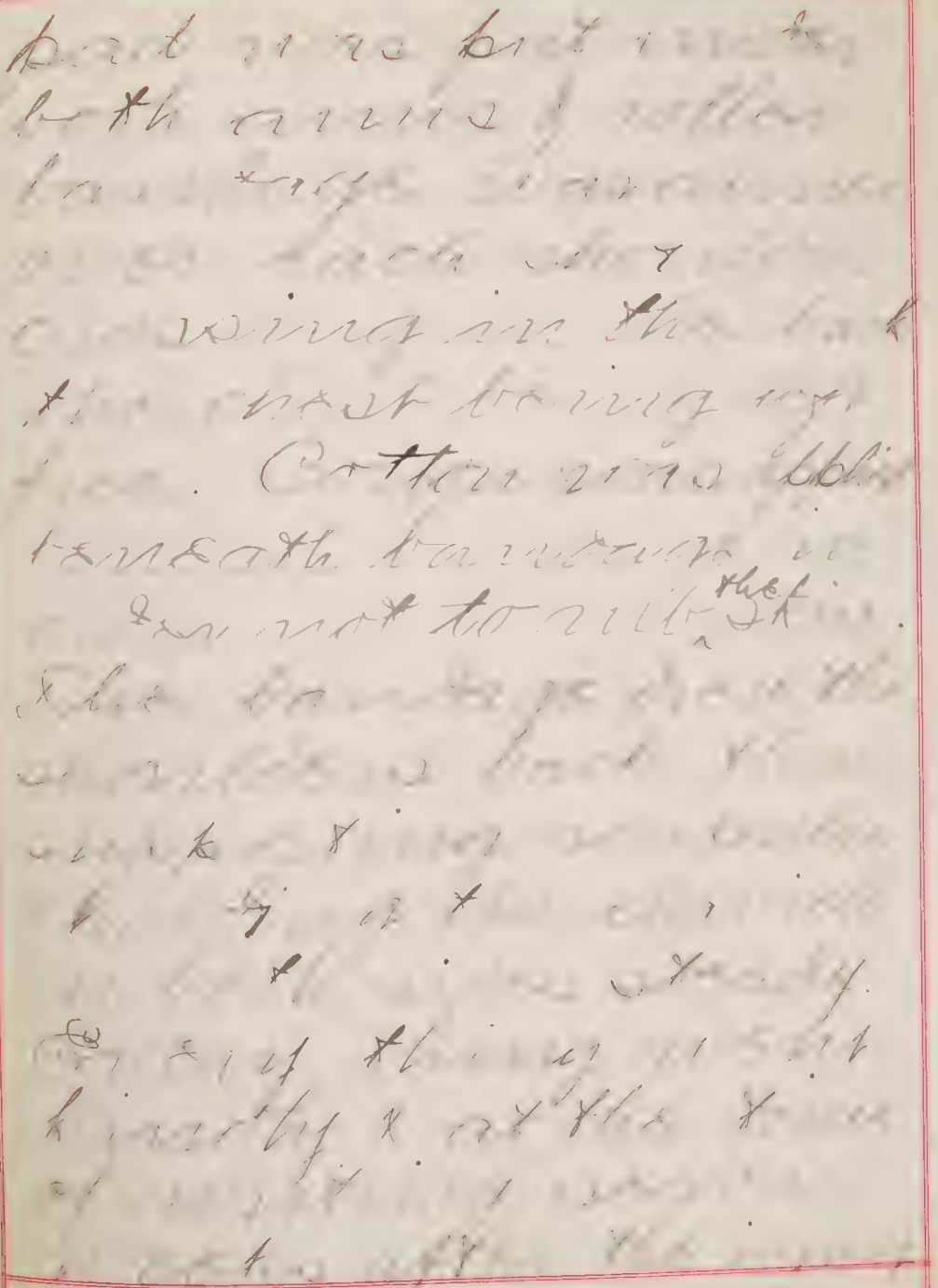
Some of these are to be preferable; to Quinine, except in the commencement of the treatment; will not [illegible] without the administration of [illegible]

Palliative [illegible]; during the paroxysm,

I



VII



VIII

XI

Pericarditis occurs in two forms Acute and Chronic. I shall confine my thesis to that form known as Acute Pericarditis.

Anatomical Character. Acute Pericarditis occurs as diffuse and circumscribed. When it occurs in the circumscribed form the products of inflammation are generally located at the base of the Heart and near the origin of the great vessels. Diffuse Pericarditis is the more common form. Inflammation of the pericardial sac resembles very closely the inflammation of other serous membranes. First the serous membrane becomes inflamed owing to the congestion of

[illegible] over the pericardium.
The exudation consists principally of
serum, fibrin, [illegible] and
pus-cells, at times the [illegible]
[illegible]. The serous form [illegible]
[illegible] pericarditis [illegible]
this condition. [illegible] red
[illegible] may be present in such
numbers as to give a reddish or
brownish color to the exudation.
In this condition the disease Haemorrha-
gic Pericarditis has been given. It
is especially connected with tuber-
culosis or cancer occurring in the
pericardium. When the [illegible] are
present in very great numbers.

which is rare. "Purulent Pericarditis" is said to exist. it occurs occasionally in Pyaemia. it may be produced by the extension of a purulent inflammation from contiguous structures. the effusion of fluid varies greatly in quantity in different cases. it may be that only a few ounces are effused and in other cases the amount may be a pint or more. it is generally a straw-colored fluid and has floating loosely about in it small particles of fibrin. if the case terminates favorably the serum is absorbed and after disintegration of the fibrin it also undergoes absorp-

tion coincidently with the absorption of the inflammatory products. Adhesions of dense connective tissue may develop and sometimes to such an extent as to obliterate the pericardial sac. But the more common form of adhesion is bands and threads passing from the visceral to the parietal surface of the pericardium.

Purulent pericarditis pursues a less favorable course. a large amount of pus may accumulate in the sac and may escape externally by ulceration forming a fistulous opening or it may escape internally into the lungs.

Edema &c. For the sake of convenience acute diffuse pericarditis is generally divided into three stages. First stage extending from the period of the disease at which the effusion is sufficient to be appreciated by the physical signs.
Second stage, or the stage of effusion, extends until the fluid is absorbed. The third stage or the stage of convalescence dates from the absorption of the fluid until recovery.
Clinical History - generally the symptoms are made up of co-existing pathological conditions such as acute articular rheumatism

causing Bright's disease &c in these conditions it is difficult to determine what symptoms are due to the Pericarditis. Pain generally attends the development of the inflammation which is described as being acute and lancinating in character similar to the pain experienced in pleurisy. When pain exists it is always considerably increased on forced respiration. owing to this fact pericarditis may be mistaken for pleurisy. Pain may or may not be a prominent symptom, as its intensity varies very much. The condition...

[illegible] an expression of [illegible]
suffering. [illegible]
[illegible]
[illegible] the [illegible]
the [illegible] act as in Pneumonia
may be noticed at times. [illegible]
Tenderness greatly increased pain
on pressure. Pulse is described as
being accelerated and vibratory.
Pyrexia anorexia weakness &c
exist. Symptoms referable to the
second stage are effusion and as
soon as this takes place the inten-
sity of the local symptoms sub-
side. But if this be rather sudden
and great in amount distending
the pericardial sac symptoms [illegible]

chorea and tetanic convulsions have been known to occur and if they exist early may mask the real affection. Post mortem examinations reveal no anatomical lesion of the nervous system & so these symptoms are generally considered to be functional in character. The severity of this disease is in direct relation to the amount of effusion and the intensity of the inflammation. If the inflammation be not great and the amount of effusion small all grave symptoms may be absent and it may even be so slight as to pass by

without attention being directed to the thoracic cavity at all.

Again, in some cases the symptoms are grave in the extreme.

With absorption of the effusion that has been great in amount subsides the symptoms of compression of the heart. This absorption differs in different cases disappearing rapidly in some and slow in others. During convalescence heart action is weak and easily excited.

Pathological Character. Inflammation of the pericardium is about the same as in inflammation of other serous membranes.

or there may be a large amount of fibrin and only a small quantity of fluid. again, both may be very slight.

Etiology.— Exclusive of Inflammation Pericarditis is almost always secondary and in most cases connected with acute articular Rheumatism. it may also occur in acute or chronic Bright's disease but is more [illegible] with the latter form of disease [illegible] it is considered to be due to the accumulation of urea in the blood. it has been observed to occur in the course of the eruptive and continued fevers, Variola, Scarlatina &c

In these conditions its pathological
condition is in all probability the
same as when it occurs in the
course of rheumatism or py-
aemia. It sometimes happens
in the course of pneumonia and
pleurisy that inflammation of
the pericardium or endocardium is set up by
extension of the inflammation
from the pleura. This happens
more particularly when the left
lung or pleura is affected.
Endocarditis or pericarditis occurring
[illegible] is a very rare disease; when
[illegible] it is found to exist in
connection with one or other
of the above mentioned conditions.

Diagnosis:- Pleurisy, Pneumonia, and Pleurodynia are diseases from which Pericarditis can not be dis-criminated by its symptoms alone. Pain elicited in connection with the first two of these diseases is promi-nent, as found. In marked in-ces the symptoms are more sev-ere. Here physical signs must be brought to our aid and are very valuable. In auscultation a murmur heard over the precordia which is synchronous with the action of the heart is proof of the existence of Pericarditis. This sign comes very early and is known as the cardiac friction murmur. It is a double

sound produced by the contraction & relaxation of the heart and has been likened to the creaking of new leather. It is limited to the praecordial region and is heard with greatest intensity before [illegible] [illegible] and when the patient leans slightly forward. By palpation, fremitus is occasionally observed. A murmur identical in character with that heard in pericarditis is sometimes observed in cases of pleurisy where the seat of inflammation is situated in the anterior part of the pleura next to the pericardium. But it only extends to the border of the heart it varies in intensity

more than the ordinary cardiac friction murmur and there would also be other symptoms of pleurisy present. It is generally more or less affected by the movements of respiration. Percussion in the second stage of pericarditis determines the amount of liquid effusion. The praecordial area of dullness is increased to a greater or less extent and it may even be flat in character. When the pericardial sac is filled with fluid it forms a pyramidal area of dullness or flatness on percussion. The apex of which is near the sternal notch and the base passes from a point on the

right side between the right margin of the sternum and right nipple to a point on the left side with- out the nipple and a little below the level of the apex beat in health. If the sac be only partially filled with fluid dullness will be more or less marked in propor- tion to its amount. If the effusion be very great it may cause bulging
of the intercostal spaces
to a slight extent. Diminution or the entire disappearance of the friction sound occurs when there is much effusion. Occasionally it remains when the sac is filled and even when it is dilated. If it have disappeared or diminished

during the second stage, it returns again after the absorption of the fluid. It then persists until agglutination takes place. At times it continues during and after the third stage to a slight extent. When the accumulation of fluid is considerable, the apex beat is weakened and altered in position, being carried in some cases as far to the left as the nipple line and as high as the fourth intercostal space. The first sound of the heart becomes feeble and shorter.

Prognosis.— Acute Pericarditis is occasionally a very dangerous

affection but in other cases it is comparatively a serious one. The gravity depends very much on the suddenness and intensity with which the disease manifests itself, on the amount of inflammatory exudation and especially upon the quantity together with the rapidity of the effusion. Death may be caused, when the effusion is great in amount and quickly thrown out by paralysis of the heart or by syncope. The syncope being caused by compression. Generally however when death occurs it is in [illegible] the disease lasting from one to two

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stages. I am indebted [illegible]
[illegible] and would undoubtedly
be inappropriate treatment. When
this affection is developed in the
course of any debilitating or
other grave disease such as Bright's
disease, Pneumonia &c. Therefore
blood-letting is not to be employed
in such a case [illegible]
it occurs in the course of such disease
as to sort of [illegible] impair
[illegible] the ability of the system
to sustain an extra disease. It is
never indicated after effusion to a
considerable extent has taken place.
In the first stage depletion by
means of the saline purgatives

or the water dressing may be em-
ployed. Blisters in this stage
are more harmful than bene-
ficial by adding to the pain and
discomfort of the patient. If the
amount of effusion be so great as
to embarrass and compress the heart,
it is of the utmost importance that
its removal should be effected as
soon as possible. This may be done
by small blisters applied over the
praecordia and then allowed to
dry rapidly. Hydragogue cathartics
and diuretics may be used
but as these are very depressing
agents much care should be exer-
cised in their administration.

When used, their depressing effects upon the heart and system at large should be met by the proper administration of alcoholic stimulants and nourishing diet. Elaterium is one of the best agents to use in this case, as it produces very copious and watery evacuations. Its depressing effects must be met by proper stimulation. When the heart is feeble and irregular either in the first or second stage Digitalis is indicated. Where the compression is very great and syncope threatened it may be necessary to draw off the fluid by aspiration. The best point to

insert the needle of the aspirator a little to the sternal side of a perpendicular line drawn mid-way between the left margin of the sternum and left nipple, and between the fifth and sixth ribs. Too much of the fluid should not be drawn off at once or fatal syncope may follow.
In the third stage of pericarditis owing to the liability of fatal syncope from muscular exertion it is of great importance that the patient should be kept as quiet as possible. In the treatment and physician, the stomach should not be overloaded but easily dig-

tive and nutritious diet given.
Tonics and good hygienic surroundings promote recovery.
When Pericarditis occurs in the course of Acute articular Rheumatism and being due to the same morbid element in the blood, this, the common cause should receive attention and treatment directed to its removal. The pericarditis subsides as the cause is removed. When ending in recovery without becoming chronic adhesions to a greater or less extent may be looked for in some cases of pericarditis where patients have died subsequently from some

their cause, on post mortem examination. The pericardial surfaces are not infrequently found to be adherent over its whole extent and yet no symptoms referable to the heart existed during life. These adhesions do not, as was formerly supposed, tend to progressive enlargement of the heart. Pericardial lesions often coexist and this led to pericarditis being considered a dangerous disease from its remote effects.

Marshall P. Smith

Acute tubular [illegible]

by

W. S. Sinclair

of S. C.

The sidneys, two somewhat elliptic-form organs situated below the diaphragm and back of the peritoneal cavity, are the great sewers of the body. When we consider that most of the waste products of the body are eliminated by them it is not to be wondered at that they are so often the seat of disease. If the system be poisoned in any way, either by pathological change in its own tissue or by poisons introduced from without, its influence is brought directly to bear on this organ. Among the diseases, to which the sidney is liable is a group differing more or less from each other but all having one symptom in common - albumen in the urine. This group is known by the name of "Brights disease, after Dr. Bright, because to him was due the honor of first thoroughly investigating these

diseases and giving the result in definite shape. Of these, we have selected for discussion Acute tubular nephritis or acute inflammation of the uriniferous tubules.

Pathological Anatomy. Not much is definitely known of the pathology of this disease. The following is generally accepted as — the kidney is much enlarged — it may be to double its normal size, the enlargement being in the cortical portion; it is engorged; the surface is smooth and the capsule adherent. The color of the cortex may vary from a whitish gray to a reddish gray; the pyramids are deeply congested. Microscopical examination shows the convoluted tubules to be the seat of trouble. The epithelium is much swollen from granulation formation so that the lumen of the tubule may be nearly closed. Fibrin may also close the canal

The walls of the tubules may be put on the stretch by the profuse exudation of granulation matter to such an extent that the walls in places give away. Such parts become the seat of fatty degeneration - this may be confined to the original seat or extend to many tubules.

Causation. The causes of this disease are various. The two principal modes in which the causes act are by throwing increased work on the kidney and by direct irritation of the organ. If the causes acting by the first method cold is perhaps the most common. It is probable that pregnancy acts in the same way. It is held by some that scarlet [illegible] acts in the same way but is is probably incorrect it acting by the latter mode or by direct irritation by poison generated by the disease. Scarlet fever is probably the most frequent cause. Lead, arsenic and other drugs of like action

serve to light up the disease also. Again substances producing hyperaemia of the organ may set up the trouble as cantharides turpentine &c. Typhoid fever, erysipelas, and related maladies may, like scarlet fever, act by directly poisoning the organ. Alcohol is classed among the causes by some writers but it is probable that this is a secondary cause - the alcohol causing exposure to cold and the cold causing the disease.

Symptoms. The mode of onset is various. In the beginning of the disease the kidney may not be at all suspected. When it arises during an attack of scarlet or typhoid fever, erysipelas, &c the onset will be variously modified. When occuring as a primary malady one of two courses is generally followed. It appears either suddenly with high fever, pain in loins, nausea, vomiting, and anorexia or it may set

in gradually with insidious symptoms. When ushered in by the former method, it is usually due to sudden chilling. This is the least common mode however. When the disease is gradually established it is very insidious the symptoms being very vague. Often the first symptom pointing to the kidney as the seat of trouble is puffiness around eyes and bridge of the nose. This symptom which is by no means a constant first symptom is very characteristic of this disease. The ordinary symptom leading to suspicion of the kidney is the change in the urine. The urine is decreased in amount or may be entirely suppressed. The sp. gr. is increased reaching perhaps 1030. The urea is much less than normal due to suppression of the solid constituents. The urine becomes dusky and sometimes of a decided reddish tinge.

Microscopical examination shows the presence of albumen in large amount. Blood globules are found either in tact or disintegrated. Hyaline or coagulated blood casts may be observed. Epithelial cells will also be found present. The quantity of these cells will serve as an index to approximate the severity of the attack. Later in the course of the disease the pale hyaline casts are supplanted by large casts of the same variety accompanied by an abundance of granular casts. The presence of albumen is the most significant symptom. This may be tested for either by the heat or nitric acid test. Both should be used however to be absolutely correct. Heat may give other precipitates than albumen so may nitric acid but each will clear up all precipitates except the albumen. The blood and vessel walls are so changed in this dis-

which prevents the retention of food and to the loss of albumen.

Course and duration. This depends much on whether primary or an accompaniment of other disease. When primary, the attack is more severe, than when secondary. If caused by another disease it modifies the course of that disease. The febrile symptoms generally subside after a few days. The dropsy depends much on the prolongation or rather duration of the suspension of excretion. If the urine be much suppressed, oedema appears early if entirely suppressed it may appear in one week. The symptoms may be relieved temporarily by vicarious discharge of the kidney's functions by the skin and intestines. This will be of little service if, in the mean time the function of the kidney can not be restored

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these measures are to exhaustion ... continued. If the action of the kidney can be ... natives recovery may gradually ... to act ... in two to three months or death may result from convulsions, coma or oedema of the lungs. It still remains to speak of this disease as an accompaniment of pregnancy. It may occur as a complication of either the first or last stage. The probable cause is given above. Visual phenomena with headache and vertigo are generally the first symptoms but oedema may be the first cause of suspicion. Some of the first symptoms may be overlooked when it occurs in the early stages of pregnancy, the symptoms of the two conditions closely resembling. The nervous symptoms are much intensified in pregnancy - violent convulsions and maniac

al excitement arising. The supervention of this disease frequently causes abortion or premature labor. After the abortion, symptoms referable to the stomach subside the they may continue running into the chronic form. The trouble may recur with subsequent pregnancies or may never appear again. Occasionally it is the immediate cause of death.

Treatment: The first indications in the treatment of this malady is relief of the system. One or two days may make a great difference. Immediate relief is required. Diaphoretics and hydrogogue cathartics are called for. To produce diaphoresis hot vapor bath and jaborandi or its principle pelocarpine are the best means at our command. Tr. jaborandi in drachm

dose until profuse sweating is induced or pilocarpine may be substituted in doses of the muriate. It must be borne in mind that these drugs are cardiac sedatives. Under the administration of this drug urea will be detected in the sweat. The best hydragogue cathartic is [illegible]. If this be not at hand croton oil or gamboge may be used. In administering elaterium it must be remembered that it is also a cardiac sedative. These being given to relieve the system, temporary measures must now be taken to restore the function of the kidney. For this digitalis is the best drug at our command. It acts secondarily and does not excite hyper[illegible] of the kidney. The infusion is the best preparation. Dr. [illegible] [illegible]

advantageous, to substitute [illegible] for the tr. cinnamon in this preparation. This may be given in ʒ [illegible] doses often repeated. Large draughts of water will be found beneficial. If revulsive agents are required cups will be found beneficial. If the patient be [illegible] cups should be applied & about 3 or 4 ounces of blood may be drawn. Morphia is necessary, to combat the nervous symptoms but it must not be used if coma exist. When the nervous symptoms are not very urgent Bromide of Potassium or Chloral may be used.

FEB 16 1942

The Dean's office states that this man failed to graduate from: University of Maryland, College of Physicians & Surgeons, or Baltimore Medical College.

Ruth Ley Briscoe
LIBRARIAN

through vag- and

[illegible] intestines. Inflamma-

[illegible] [illegible] bacteria

[illegible] (Ra) [illegible]

[illegible]

[illegible]

[illegible]

increased development in-

number and are enlarged.

[illegible]

[illegible]

glands. They become enlarged

[illegible]

[illegible] ation, [illegible]

enough. You can [illegible]

[illegible]

[illegible]

[illegible] the small ulcers
[illegible]
diminished. Red
beds and internal
malleoli. Fever in
all acute cases
[illegible] remittant
[illegible]
[illegible]
[illegible]
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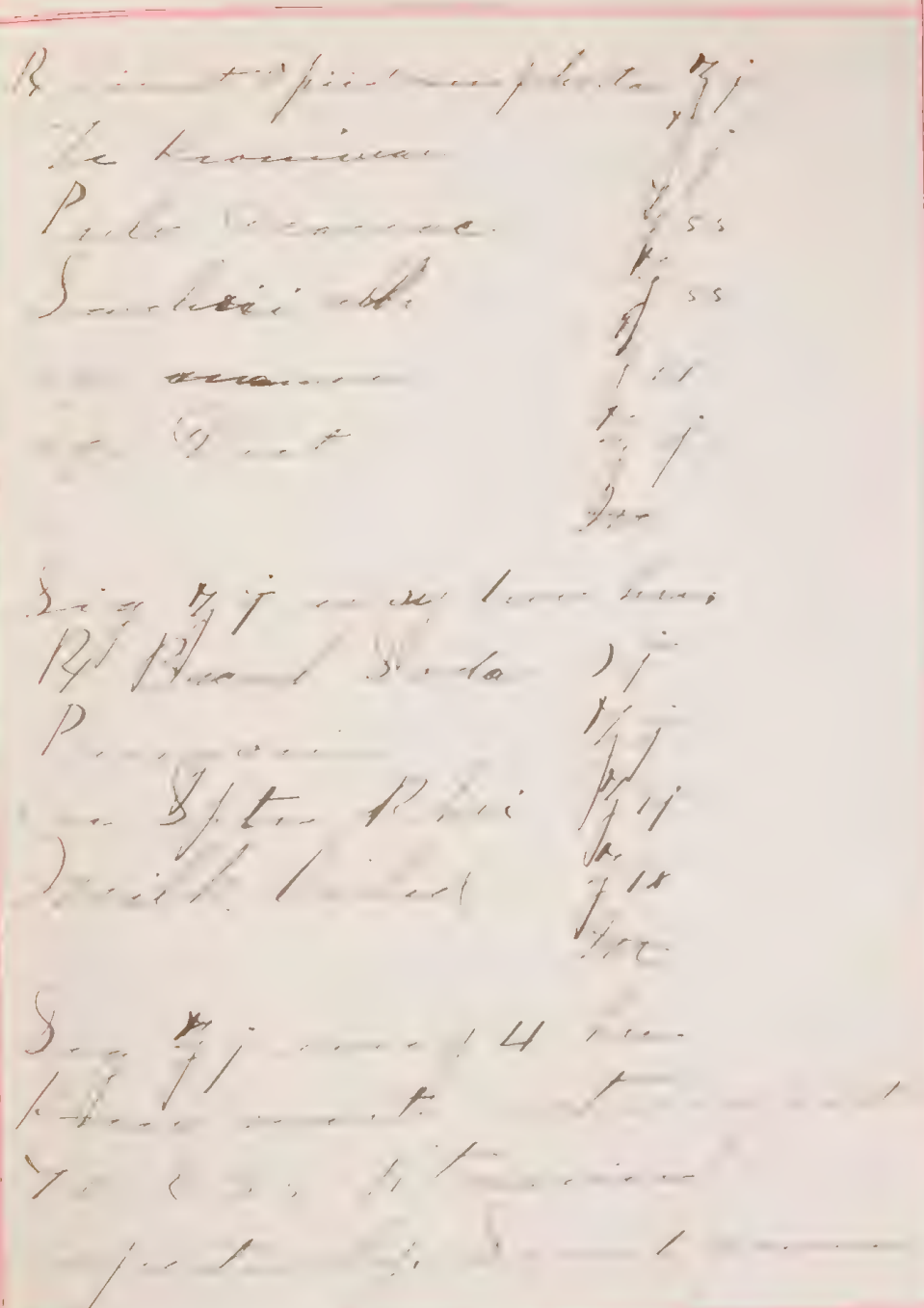
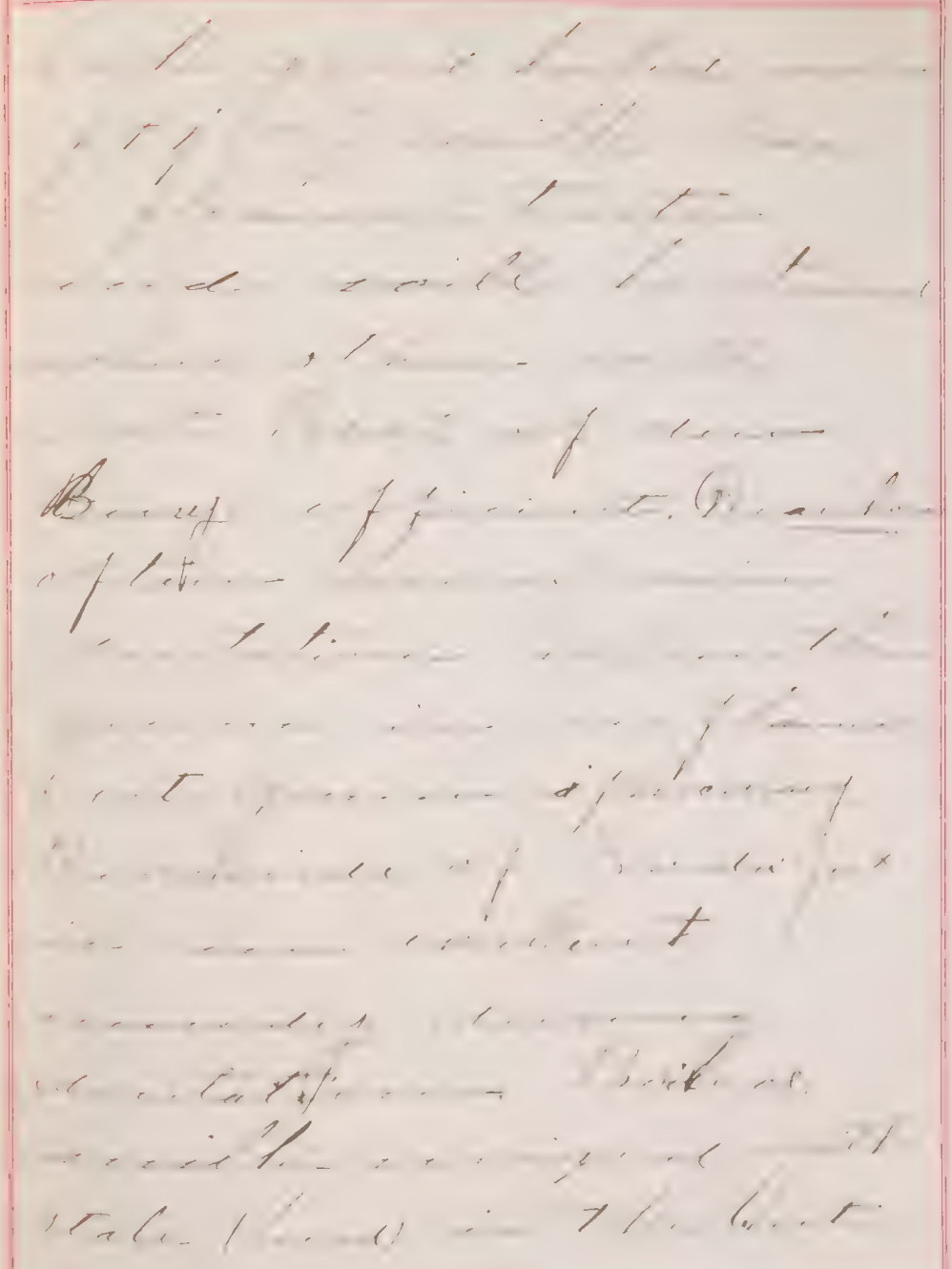




The Physiology of the Stomach
including its Anatomy and Histology

In looking over the
broad field of Medical Science
for the purpose of choosing a subject
upon which to write a Thesis, one
is almost bewildered by the in-
numerable subjects which present
themselves, all of which deserve
a deeper consideration than the
humble writer could presume to
give at the present limited state
of his knowledge of Medical
subjects.

The subject I have chosen, however
was not selected because I think it
easier to discuss or deserving of
less consideration on the contrary

it is one of prime importance and has been discussed for centuries by the most eminent Physiologists; nor has yet all the facts been fully eliminated.

Probably as far as the function of the stomach is concerned, that is well enough established; for all practical purposes: its function being to act as a receptacle for the food; to secrete Gastric Juice and to insure their admixture.

The Stomach is somewhat conical in shape, having a larger or cardiac end, and a smaller, or pyloric end; however this cone is not horizontal but curved, presenting a superior or lesser curve and an

inferior or greater curve.
It lies immediately beneath the diaphragm, its cardiac extremity being in the left Hypocondriac region, while it pylorus is in the right, to a slight extent; therefore a great portion is in the epigastrium.
The Stomach consists of three coats, a serous, a muscular, a cellular and a mucous
The serous or peritoneal coat is a smooth glossy covering consisting of a single layer of endothelial cells.
The muscular coat lies immediately beneath serous and consists of Two entire layers of muscular

fibers and a third partial layer the two former are a longitudinal and a circular the latter partial layer is oblique and is principally confined to the cardiac end. The longitudinal and circular are vastly of the more importance. This muscular coat kneads the food and expell it through the pylorus at the proper time. This muscular coat is of the pale variety.
Next in order we have the Sub-mucousa or cellular coat, into which the minute fundi of the gastric glands dip, and lastly we have the Mucous coat studded with the minute orifices of the blind tubes which secrete the Gastric juice

This Mucous coat is made up of cylindrical epithelial cells which throw off a thick fatty mucus, which acts as a protection to the delicate mucous membrane, against all kinds of irritating substances, such as strong alcoholic drinks, strong alkalies or acids, etc.

Beginning at the Cardiac of the Stomach the mucous membrane is covered with a single layer of beautiful columnar epithelial cells, most of which are mucous-secreting goblet cells & the surface of the mucous membrane is pan numerous fine ducts of glands, placed very closely

side by side. These extend more or less vertically, or perpendicularly into the depth of the mucous membrane.

In the Pyloric end of the stomach where the mucous membrane presents a pale aspect the glands are called the Pyloric glands, in the rest of the Stomach where mucous membrane presents a reddish or red-brown appearance, they are called the Peptic glands

Owing to the numerous ducts opening on the surface of the mucous membrane, a villous section seems to be made up of thinner or thicker folds or villi. The Plicae villosae

But they are not real villi.
The part of the mucous membrane containing the glands is called the mucosa, outside this is a loose connective tissue containing the larger vessels — This is the Submucosa. Between the two, but belonging to the mucosa is the muscularis mucosa a thick strata of bundles of non striated muscular tissue arranged in most parts of the stomach in an inner circular & an outer longitudinal layer
The tissue of the mucosa is adapted owing to its containing glands closely side by side the gland tubes between them is a delicate connect-

ive tissue, in which minute cap
illary blood vessels pass in a
direction vertical to the surface
Numerous small bundles of non
striated muscular fibres arise from
the muscularis mucosæ bounds
the surface — forming longitudin
al muscular sheaths, which pass
around the gland tubes.
The plicæ villosæ of the superficial part of the mucosa
contains fibrous connective tissue
and numerous lymphoid
cells.
The peptic Glands are more
or less wavy tubes extending
down to the muscularis mucosæ.
The deep part is broader than the

It is more or less curved, sometimes branched: this being the fundus of the gland, that portion nearest the mucosa, where it is thinnest is called is called the neck.

Two or three glands may unite in a common duct, as before stated The duct is lined with columnar epithelial cells, continuous with and identical with those of the free surface of the mucous membrane.

Next to the lumen is a continuous single layer of more or less transparent, granular looking epithelium cells, each with a reticulated protoplasm and a spheroidal or oval nucleus.

In the neck these cells are only normal but further down increase to cylindrical and in the fundus of the gland tubes they become columnar. These cells are called chief cells or central spheroidal cells.
Outside these is the lining membrana propria of the gland tube. Still between the membrana propria and the chief cells, are scattered here and there single oval spheroidal or angular granular and opaque looking cells.
These cells are not found in all of the glands, but more especially in the glands nearer the cardia.
They are much larger than the central (or chief) cells and stain much easier
On account of their position they have

been called parietal, marginal or border cells, and from their oval shape, oval cells.

These cells are very easily recognized by their large size and their bulging the delicate membrana propria.

They were formally thought to be the pepsin secreting cells, and were called the peptic cells, but now this supposition has been thoroughly disproved and they are now supposed by some to be the hydrochloric acid secreting cells.

The absence of these cells in the pyloric end of the stomach gives this supposition some weight as that end of the stomach is nearly always neutral or alkaline.

There is another kind of glands de-

scribed by most Histologists & Physiologists, namely the pyloric glands, their ducts are somewhat longer than those of the peptic glands, sometimes reaching half the depth of the mucosa, whereas the ducts of the peptic glands seldom exceed one quarter of the depth.
The epithelial lining of the ducts are the same as that lining the peptic ~~glands~~ ducts.
The histology of the pyloric glands is so near that of the peptic glands that it is not necessary to give it, it suffices to say that the difference lies in the difference in the length of their ducts & the absence of the "oval cells"
These glands being serous of course cannot secrete mucous; they are supposed to secrete pepsin. by Edstein &

Heidenhain, but their views on this subject have not met with universal favor

These cells lining the membrana propria are seen to undergo a change during secretion, so that after the digestion of a full meal, they become smaller and less transparent than during secretion; their protoplasm in the former state is a denser reticulum than in latter, the interstitial substance, in the meshes of the cell reticulum becoming increased in amount during secretion. Between the pyloric and peptic glands there seems to be a zone of gradual transition one into the other, the peptic gland ducts gradually lengthening as they approach the pyloric gland ducts

and the oval cells gradually become fewer and fewer.

The mucous membrane also contains isolated lymph follicles, glandulae lenticulares and also the glandulae agminatae are found in the pyloric part of the stomach.

The submucosa is a very loose texture thus enabling the mucous membrane to be folded in all directions, thus forming the rugae of the stomach

We will now return to the gland tubes and say a word regarding the vessels surrounding them

All of these tubes are richly supplied with capillary blood vessels derived from the arteries of the submucosa and we have corresponding veins.

The lymphatics form a network in the mucosa near the fundus of the glands. Into this plexus leads lymphatics running longitudinally between the glands freely anastomosing one with another and extending to near the surface. Another plexus belongs to the submucosa.

Between the circular and longitudinal stratum of the muscular coat runs non-medulated nerve fibers, with a few ganglia in its nodes, corresponding to plexus of Auerbach of the intestines and belonging to the outer muscular coat; there is also a plexus of the same kind of nerve branches in the submucosa, this is designed for the musculans mucosæ and the mucosæ and

corresponds to the plexus of Meissner of the intestines
Rabé says that in the gastric glands of the horse are surrounded by a rich plexus of nerve fibers, terminating in fusiform cells.
There could be a great deal more said about the Histology and Anatomy, but I must hurry on for fear of consuming too much of the reader's time; so now we begin with the Physiology.

Mode of secretion of Gastric Juice.
This function seems to be under the control of the nervous system through the Pneumogastric and Spinal nerves the latter being the vaso-motor nerves the Pneumogastric probably the nerve sensation and also trophic influence

In all probability the secretion of gastric juice is under control of a special nervous mechanism, notwithstanding the fact that all visible nerve connection between it and the central nervous system may be cut without any alteration in the secretion save that which would naturally follow the changes in blood supply, which is profoundly altered by the severing of the splanchnics.

Most believe that it is a simple reflex act, as may be shown by sudden emotion checking the secretion and the smell of a good meal causing the secretion to commence.

The secretion may be brought about by mechanical or chemical stimuli

Thus by irritating the mucous mem-
-brane with a glass rod through a
fistula it may be brought about or
by the swallowing a small ammount
of alcohol or pungent condiments
such as pepper cloves &c weak alkaline
solutions also stimulate the secretion
but none seem to act so well as the
normal bolus of food well saturated
with the alkaline saliva
It is probable that the central are the
chief secretory cells and not the
large oval cells as was formally sup-
-posed. for the latter are seen to
undergo no change while the former
undergo a decided chande as already
partially explained therefore for want
of space I will not go further into

The details of this change.

When the Gastric mucous membrane is irritated through a fistula with a glass rod or other mechanical stimulus it is seen to become red or pinkish and numerous drops of secretion may be seen, like as many drops of perspiration. This gastric juice may be obtained for experimental purposes or artificial juices may be prepared by the maceration of finely divided pig's stomach, or any other animal's stomach, in Glycerine. Then by placing a one of this prepared juices in a test tube with some proteid material it is seen to undergo rapid digestion

if kept at the body temperature (98° F.)

The active principle of gastric juice is called pepsin which has never been isolated but is a purely theoretical substance formed as it were by the theoretical substance pepsinogen (or zymogen) exploding into pepsin

The action of pepsin is limited to proteid substances; converting them into peptones as the last step but they are first converted into parapeptones which are not capable of being absorbed.

The digestion may be arrested at this point by various agents such as alcohol or strong alkalies.

Pepsin can only act in an acid media therefore alkalies render it inert. Pepsin has no action of fats but digests out the framework of adipose tissue and thus by the heat of the body the fats are rendered fluid and more acceptible to the steapsin (the fat digester) of the pancreatic juice

The the gastric juice was for a longtime supposed to be acidifyed by lactic acid but it is now pretty well established to be Hydrochloric acid other acids may also be found in it, but they are supposed to be formed by the decomposition of substances

in the stomach.
Too much acid seems to check or stop the digestion and too little acts in the same manner but if more acid be added the digestion proceeds
The action of gastric juice is not limited to the proteids of meat but also to that principle of grains (Gluten)
The formation of sugar from starch which commences in the mouth is supposed to be stopped in the stomach by Dalton and others but some Physiologists say that it is not
There would be fifty times as much said on this important subject but for time & space I will close

26 S. Green St.

Respectfully
W. T. Stout
New Hope Va

Intermittent Fever.

Definition. Intermittent Fever is a form of Malarial fever which is characterised by its prevalence in certain regions where the poison Malaria is generated, by its febrile and paroxysmal character and by the fact that the cold, hot and sweating stages occur, and in regular succession. The range of the development of the poison may be said to be confined to 65° north and 50° south latitude and within these bounds it is decidedly the more prevalent near the

equator.

Etiology. The great cause is malaria the development of which however is too extensive a subject to be discussed at length here. Suffice it to say that its development depends upon certain conditions in which the presence of vegitable matter moistened and a certain average degree of temperature is necessary. This temperature must not be lower than 58° for for as a rule are ordinarily it is not generated if it be below 65°. The poison gains entrance to the system either through the lungs or the intestinal tract. Anything whatever that tends to debilitate an individual either mentally or physically,

incident thereto [illegible] doubtless [illegible] malarial poison and various other depressing influences may be put down as predisposing causes. Among these are most commonly intemperance, exposure and specially exposure to wet, great fatigue, bad hygienic conditions and a vast number of like debilitating causes.

Morbid Anatomy. The external signs are few. The only constant pathological lesion is the congestion of the internal organs. The spleen & liver are always somewhat enlarged but this enlargement is due doubtless to hyperaemia. The structural changes in these organs do not seem to be the

disease has existed for a long time.
The Kidneys also are more or less
hyperaemic, and the [illegible]
of the intestines is affected in like man-
ner, but it is not attended by any
syns of catarrh either gastric or intes-
tinal. Changes in the blood, such
as pigmentation and great diminu-
tion of red corpuscles, which are found
in the more severe types of infectious
diseases and in the [illegible] type
of this disease, are not found here.
The blood however clots to a certain
extent and is dark in color. If the
fever continues for a long time the
number of red globules will be diminu-
ished and the fibrin factors also.

[illegible] changes [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] always attends this disease. [illegible] yet has ever been able to satisfactorily explain why the fever is paroxysmal, and not continued. During the existence of a paroxysm the white blood corpuscles are very rapidly increased in number.

Symptoms. This fever, as has previously been said, is paroxysmal in character and its types are determined by the interval of time which elapses between each paroxysm. The first is the quotidian type and in this the paroxysms occur every day there being an interval of 24 hours

quotidian, in which two paroxysms
occur daily; the one more severe in
character occurring at a given time
in the forenoon, the one less severe
in the afternoon or evening. Then
there is the double tertian, in which
a paroxysm occurs every day but
it differs from the quotidian in that
the paroxysms resembling each other
in severity occur at intervals of
48 hours, those in between being less
severe in character. There is also
a form of Intermittent Fever met
with in which the paroxysm occurs
on the eighth day there being an
interval of 7 days between each
paroxysm. But of all the forms

there would be.

Paroxysm. This is composed of three stages, the cold, hot & sweating which as a general thing can be easily distinguished from each other. Pain in back, languor & general [illegible] [illegible] in the cold stage

Cold stage. When one passes into this stage the first sensation is that of coldness along back. From this extends to the extremities and gradually [illegible] an uncomfortable sensation of coldness [illegible] over the whole body. The skin now becomes shrunken in appearance, the ends of fingers & the lips become blue, teeth begin to chatter, any attempt to do anything

dependent upon the severity of the case. Their usual duration is from 1/2 to 3 hours. The patient does not as a rule have a pronounced chill, though he may [illegible] and calls [illegible] [illegible]. The chill does not end abruptly but gradually, the shaking becoming less & less and pari passu with this diminution of chilliness, the patient may have flashes of heat in his extremities alternating with chilly sensations or instead of the flashes a sense of warmth may gradually steal over the patient and thus establish the hot stage -

Hot stage. The body now feels hot, the skin becomes [illegible], the blood recedes from the central organs of the body

attempting to rise, his ideas are not altogether clear & there may be excitement and delirium. There is always great restlessness, patient turning from one side of bed to the other, mouth is dry, constipation may exist and the urine is always diminished in amount and high colored & scanty- These are the principal symptoms. When these have continued for a variable length of time usually from 1/2 to 3 hrs, though they may last as long as 10 the sudating stage is established

Sudating stage- The first indication of this is the appearance of moisture on face and trunk- it is found to a greater extent in axilla & between thighs.

the and the first three & four days it is gradually diffused all over the body— The temperature now rapidly falls, the face is no longer flushed, but becomes natural in appearance; hearts action is become both in frequency and in force and the vessels cease to stand out and pulsate. A general feeling of comfort is experienced and the patient having been in this high state of fever generally falls asleep & remains so for some hours & awakens with a sense of exhaustion.

Interval. I mean the time between the [illegible] that if he has only had a bad [illegible] [illegible] well very well & will eat well.

1

...t of the disease continues and the paroxysms frequent paroxysms may soon the will begin to lose in vitality and all the symptoms of malarial poisoning will be manifested. He becomes, as it feeble. He assumes a jaundiced appearance. the spleen and liver become enlarged and the liver pigmented.
This condition may not be brought about for a long time and yet in the interval we can scarcely say that the patient was perfectly well. Sooner or later however it is sure to set up. In the quotidian type there is usually noticed by the patient a slight rise in temperature say to 101° or [illegible] [illegible] development

of first paroxysm. He will not
complain of anything specially, but
will have a warm wet feeling and
will not be disposed to make any
exertion of any kind either mentally
or physically. The fever begins then
in the morning and by noon has
reached its height. From this time it
gradually subsides & by evening the
temperature becomes perfectly normal.
Next day there will be another
rise of temperature but now the fever
does not begin until later in the
day, not until after midday and per-
haps not until evening. [illegible]
[illegible]
[illegible]

that in this affection we have the [illegible]
of patient to air up. In this affection
also we have the characteristic [illegible]
der of breath and in it the [illegible]
is out of proportion to the other stages.

Prognosis. Good in [illegible]
That is the attack has lasted [illegible]
[illegible]
have been [illegible] the prognosis is [illegible]
good. [illegible] we must have [illegible]
and [illegible] to deal with as well. [illegible]
cases however yield to treatment.

Treatment. Treatment has been di-
vided into two heads 1st that in paroxysm
2nd That for the intermission. That in the
paroxysm consists in the means of rendering
the patient as comfortable as possible. [illegible]

carefully examined [illegible]

[illegible] intermittent [illegible]

ing, such for instance as [illegible]

congestion. When percussion shows that these

[illegible]

[illegible] the quinine

is indicated as the antiperiodic power of the

quinine is increased by this agent and the

percussion dullness of the involved organs [illegible]

[illegible]

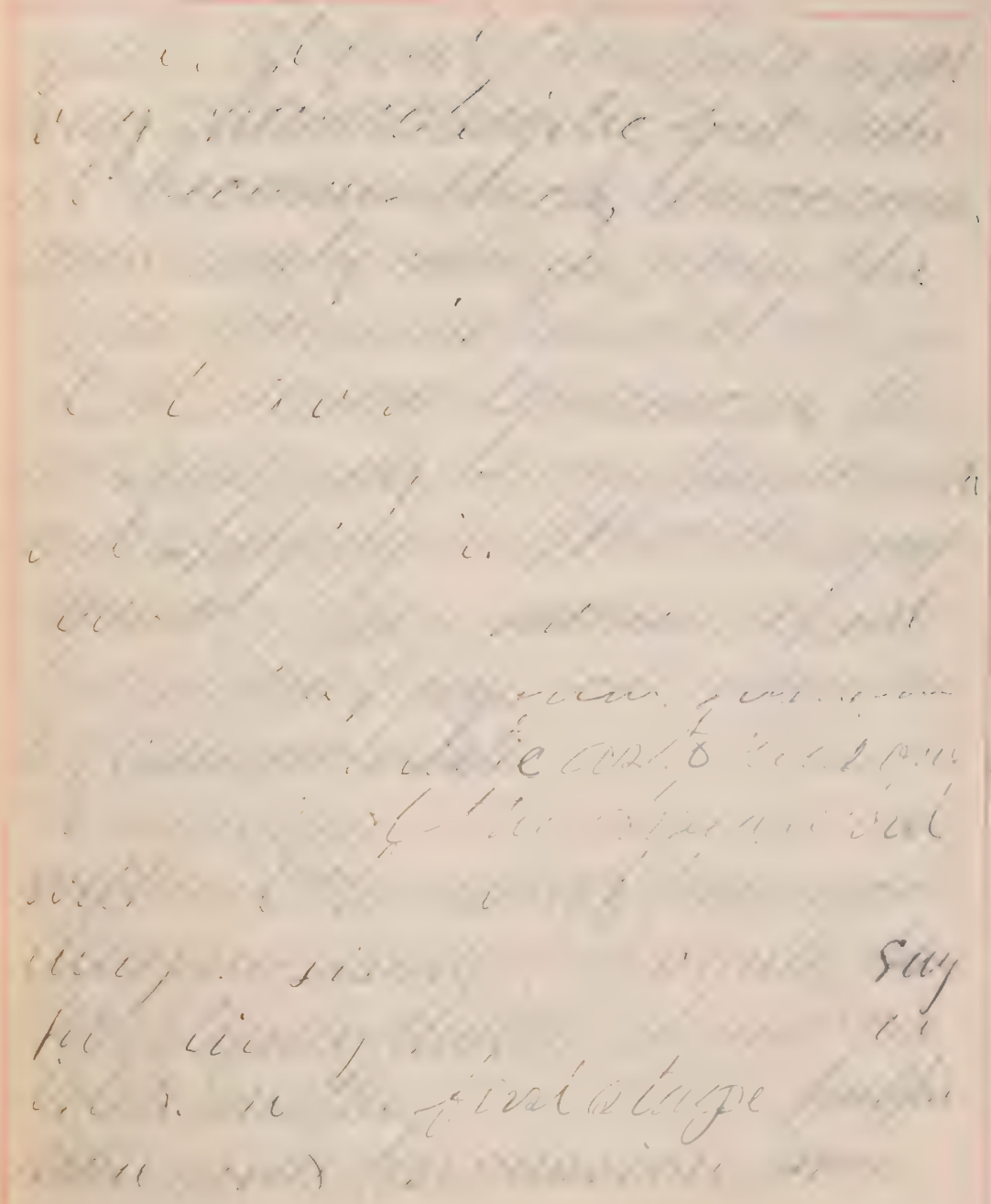
about the antiperiodic power of the quinine

[illegible]

[illegible] a

tient be of a nervous temperament [illegible]

23 p.



By C. Taggart

[Taggart -]

Water. Aqua.

The use of water in the preservation of health & the nourishment of diseases is a subject of great importance to every practitioner & the value of pure drinking water is a matter which should never be disregarded either in public or in private: To obtain this indispensable element in a state of absolute purity is impossible, but to obtain it in a state of sufficient purity, as not to introduce into the body such foreign substances, in the way of soluble & insoluble organic matters, from which the gravest diseases are most liable to arise; is a subject that at present is receiving that universal attention through our sanitary associations:

Water is the most essential element to life, for it not only regulates the body heat & carries off effete matters; but it is necessary that every part of the animal economy should have a certain amount of it. Man has been known to live for several weeks or more without food but dies when entirely deprived of it in a few days. I have said that impure drinking water can cause the gravest diseases; and this is true, for to the educated mind there can arise no doubt of the frequent occurrence of <u>Typhoid Fever</u> which is propagated through the <u>drinking water</u> coming from a typhoid locality. It [illegible] always [illegible] understood that the water of the [illegible] contains the specific germs of typhoid fever.

[illegible]; with which the [illegible] of the [illegible] [illegible] [illegible]. [illegible] of the [illegible] [illegible] of Europe [illegible] [illegible] [illegible] the [illegible] [illegible] & [illegible] [illegible] in this way in the Typhoid poison. These are sometimes injected when excrements from [illegible] containing the Typhoid poison are used for manuring fields from which the crop is then received its washings. Evidence in Cholera. [illegible] & other [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] with drinking water; & this [illegible] [illegible] in [illegible] it is, to impress on [illegible] with the great [illegible] danger of using only water from a source of [illegible] purity.

The Medicated Waters as found in nature.

[illegible]

[illegible] the [illegible] = This is
[illegible] [illegible] [illegible] of
[illegible] & [illegible] [illegible] [illegible]
in [illegible] [illegible] =
The Cold Bath is employed most
generally & should be [illegible].
The proper method of administering
is to place the patient into a bath [illegible]
the temp of the body & gradually [illegible]
[illegible] [illegible] of ice until
60° or even 40° F has been reached =
On the [illegible] [illegible] [illegible] the temp.
of the patient, the [illegible] [illegible] placed in
the [illegible], [illegible] or [illegible] = [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] = The effects
of Cold are [illegible] 3" [illegible] [illegible] [illegible].
The temperature is lowered. & the pulse
falls & becomes soft & compressible. The

the application of cold or the [illegible]
[illegible] increase the tendency to [illegible]
[illegible] must [illegible] [illegible] [illegible] [illegible]
quite [illegible] the application [illegible] [illegible]
quick a [illegible] [illegible]. The
same [illegible] seems quite plain [illegible]
[illegible] a [illegible] proportion of the [illegible]
[illegible] [illegible] a [illegible] [illegible]:
[illegible] [illegible].
In a high degree of [illegible] of the
[illegible] [illegible] the [illegible] of the
circulation is so reduced that the
[illegible] is cold, [illegible] the [illegible] [illegible]
[illegible]. [illegible] is no [illegible] [illegible] [illegible]
the cooling of the [illegible] [illegible] [illegible]
[illegible] [illegible]: The same [illegible] is
[illegible] [illegible] in this [illegible] [illegible]
and we should [illegible] [illegible] cold [illegible]
[illegible] the [illegible] [illegible] [illegible]

Epilepsy—

This is a subject which has for many years attracted the attention of the Medical profession. And although much has been learned of its nature and etiology, there still remains many of its phenomena veiled in obscurity and uncertainty. Epilepsy although only a symptome of a morbid condition must at present be considered as a disease, for the reason that we are unable to point with certainty to its exact seat or the nature of the lesion which exists. It is a subject full of interest and one that should be thoroughly studied by the profession. I believe if it were better

understood that a poor human would be relieved of a heavy burden both physically and mentally. Epilepsy is a chronic nervous disease characterized by loss of consciousness and in the more severe cases by various convulsive movements. Epileptic attacks in which convulsive movements are slight or wanting are called "petit mal." Those accompanied by general convulsions constitute that form known as "grand mal." The essential element of the epileptic attack is the loss of consciousness. Without that there is no true well formed epileptic neurosis.

symptoms— Although in many cases there is no premonitory sign, it often happens that there is some indication of a coming attack— These warnings, as it were are called aura epileptica. They are peculiar to almost each individual. Scarcely two persons being affected exactly alike—
Some describe it as a cold vapour emanating from some part of the body and passing up to the brain. In others it consists of colour visions or hallucinations of sight—
The onset of a paroxysm is often marked by a loud short shrieking cry—which from its intensity and unnatural character is truly terrific— Dr Cheyne says that upon

one occasion a parrot himself no mean performer in discords drop from his perch seemingly freightened to death by the appalling sound. The suddenness of the attack is remarkable: in an instant when the patient is in apparently good health the change takes place; and the unfortunate sufferer is stretched foaming struggling and insensible on the earth. These severe paroxysms do not usually last more than a few seconds or minutes.

The aurae are not present by any means in all cases. Delasiaue in two hundred and one cases found the paroxysms wanting in one hundred. Between the two extremes, petit mal

and grand mal there are many links of gradation. If the patient be walking on the street he may for an instant lose mind, but continues to walk and does not even stagger. Even in these mild forms the patient is unconscious for after recovery he has no recollection whatever of what has occurred. The tongue is often lacerated and bloody froth escapes from the mouth.

The pupils are almost invariably dilated. The circulation is sluggish. The extremities are cold and the capillaries inactive.

In the interval between the paroxysms epileptics often show certain evidences of disorder mental and

social and motor functions- there
--- many exceptions to this rule.
for where there has been many
attacks the mind often retains its normal
integrity Reynolds remarks in
regard to this point: a patient may
be an epileptic and a fine - but
there are epileptics whose minds
are as sound as their lungs
Still it is found that in the ma-
jority of cases the mind sooner or
later becomes involved and it some-
times happens that one attack more
by deteriorates the intellect
Prof- Hammond insists on the val-
ue of the ophthalmoscope in obtaining
valuable indications for treatment
By an examination of the fundus
of the eye either cerebral congestion

or anemia can be observed. There is no law that governs the recurrence of the paroxysms. They may recur daily monthly or even yearly may intervene between two attacks. Generally the intervals become progressively shorter. Mania is sometimes a concomitant of epilepsy it may be of a violent character during which the patient of the commits acts of violence either to himself or to those about him.

The paroxysms seldom occur during the course of an acute disease. Thus if an epileptic has typhoid fever the paroxysms are suspended until the fever abates.

Here we see the conservative workings of nature, for it would

we truly distressing more he sub-
ject to both at the same time.
Etiology— Among the predisposing
causes hereditary tendency stands
first. But in a large majority
of cases this is not present—
Reynolds says that in about one
third of his cases hereditary taint
existed. Dr Hammond has record of
three hundred and ninety six cases.
Of these sixty four had epileptic
fathers mothers or some other near
relation. Sex does not seem to
afford any appreciable cause.
Age has a very decided influence—
From the tables communicated by
Drs Reynolds and Hammond it is
seen that the period of life between
ten and twenty years of age is that-

at which epilepsy usually occurs-
Temperament seems to have something to do with the causation of epilepsy.
Those who are habituated to the use of alcohol often suffer from these "spells" which do not occur when they abstain from its use-
In many cases psychical influences are the exciting causes such as grief, fear anger- Venereal and sexual excesses are often prolific sources of epileptic paroxysms-
And again in many instances nothing either centric or excentric can be found to account for the suddenness of the attack-
Morbid Anatomy- Post mortem examinations of persons dying epileptics reveals morbid changes in almost

in the fourth ventricle, penetrating into the medulla sometimes to a considerable depth". Perhaps these changes were the result and not the cause of the disease but it goes to show that the medulla is the seat of most of the morbid changes.
Other observers have not found these conditions so prominent.
Pathology— Prof. Wiles is of the opinion that it consists of an anaemic condition of the brain. It seems to me this must be correct from the fact that nitrite of amyl is of the efficacious in warding off attacks since this acts by stimulating the heart and causing dilatation of the arterioles.
Dr Jewell of Chicago thinks that the phenomena of an attack are due

in the first instant to shame
of the cerebral vessels in which anae
mia is produced and then the relax-
ation of the shame causes convulsion
of the voluntary muscles.
Reynolds shows that the arrest of
respiration causes the convulsions.
Brown Séquard has shown that
the starting point is often in the
sympathetic nerve the nerve by which
the calabre of the blood vessels is reg-
ulated. An epileptic paroxysm is
considered as a sudden excessive
and rapid discharge of grey matter
of some part of the brain.
Hence such exciting causes as fright
anger &c only act as a match to
set the explosive material into
action. The shock cannot therefore

be the primary cause if so the effect should cease with the cessation of the cause. But clinical observation finds this not to be the case.

Diagnosis— The diagnosis of epilepsy offers little difficulty to the careful observer. Hystero-epilepsy and feigned epilepsy may be mistaken for the real disease.

By careful attention to several points the diagnosis can be made. The total loss of consciousness which occurs in epilepsy is not present in hysteria. In epilepsy there is no alternations of laughter and tears. Hysterical patients continue to avoid hurting themselves by their convulsions; they do not bite their tongue nor

foam at the mouth. The respirations are rapid and sobbing. The pupils are not dilated. The epileptic becomes insensible regardless of time and place. He falls in the fire on a hot stove or against any thing that happens to be in his way. Not so with an hysterical patient; she usually falls in a soft place.

Of the feigned diseases epilepsy is one of the most common. Cases of simulated epilepsy often occur on our streets among impostors who think to excite pecuniary charity from the public. The impostor chooses such situations as are most suitable to his own purposes. True epileptics often seriously hurt by their falls; feigned ones usually come off

without much bodily damage.
An impostor generally overdoes the mark in every respect: in real epilepsy the pupils are dilated and do not contract when exposed to light. This is a diagnostic point, for no vagabond can prevent his iris from contracting when exposed to strong light.
The skin of an epileptic is cold, that of an impostor is hot. A pretender will not bite his tongue as epileptics do. Epileptics during a fit are quite insensible to external impressions; and hence the popular modes of detection such as dropping hot sealing wax on him blowing gin into his eyes, or burning him with a red hot poker.

if we speak of having recourse to some of those painful tests in the hearing of the patient- the fit will very often soon come to an end- Bearing these points in mind it will seldom be difficult to make a diagnosis-

Prognosis- Epilepsy is one of those diseases concerning the issue of which the patient- and still more the patients friends are sure to make repeated and anxious inquiries- It is seldom that- we can with confidence pronounce a favourable prognosis- Recent- cases may be cured but- those that- have lasted for several years are seldom brought to a favourable termination.

-A paroxysm of epilepsy rarely ends

fatally. Some form of mental weakness is apt to come on sooner or later. Complete mental alienation does not often occur.

Treatment— Drugs in countless numbers have been used in the treatment of epilepsy. Of these the bromides stand preeminent and should be first thoroughly tried. The bromides of potassium sodium and calcium may be used. The dose in ordinary cases and in the beginning of the treatment is fifteen grains three times a day in solution. The bromides if successful must be taken constantly and for a long time.

The bromic cachexia which sometimes follows the administration of large doses is favourable to the eradication

of the epileptic tendency. Herfin has called attention to the salts of zinc in the treatment of epilepsy. The bromide is useful in many cases. It is best given in the form of a syrup: ℞. Zinci bromidi ʒi. syrupus simplicis ℥i. which may be given in doses of ten drops increased to thirty or more three times a day. A few drops of Fowlers solution of arsenic given with the bromides obviates the tendency to cutaneous eruptions.

Strychnia is a remedy of considerable reputation. The nitrite of amyl is beneficial in arresting paroxysms. Five or ten drops may be inhaled.

The patient may supply himself with glass beads containing the proper amount

In injuries of the skull trephining may be of great service.
The hygienic part of the treatment is important. The patient should have plenty of fresh air. exercise should be regular but not excessive.
The mind must not be disturbed by harassing cares, nor the emotions unduly excited.

Respectfully submitted
A. M. Taylor

February 1887

Puerperal Septicaemia.

No subject relating to the science of Obstetrics has given rise to greater discussion, or produced greater differences of opinion, than the title of this paper.

Although its etiology, its relation to other affections, as diphtheria, Erysipelas, Scarlatina, and the zymotic diseases generally, have been discussed by numerous authors, there remains even at the present day unresolved, many points connected therewith.

Nevertheless, one great error hitherto has been in considering metria a disease peculiar to the puerperal state; M. Pierre F. Mende considers, that in a majority,

of cases, puerperal fever is puerperal
Septicaemia due to absorption of puru-
lent matter from the genital tract.
This he does not however, consider to be
the cause in all cases; believing that it
may be a disease of itself: he having
seen cases in which there was no evidence
of Septic absorption.

Formerly, and according to Hippocrates,
Galen, Smellie and others, the doctrine
that Metastasis of the Lochia was the
source of infection, was generally accepted
as true. Later, Puzos taught that milk
circulating in the blood normally attended
to the uterus during pregnancy, may form
milk Metastases in other parts, and
produce the symptoms of Puerperal

intermittent fever. As supporting this theory, A de Jussieu, Col de Villars and Fontaine stated, that upon opening the abdomen of women dying during an epidemic which raged with violence that year, [1746] clotted milk was found adherent to the intestines. In 1801, by the startling discovery of the true nature of the effusions by Bichat, and also, that they occurred in men and non-puerperal women, this theory was found to be erroneous.

Fordyce Barker in his work on the "Puerperal Diseases," endeavors to show an entity as essential zymotic fever peculiar to the puerperal state. He considers it of unknown origin, having no characteristic lesions like typhoid and

typhus, but exhibiting at times differen-tiation to a considerable extent with the absence of some of the characteristic lesions of so called puerperal fever.

The followers of Barker have not yet succeeded in convincing the medical profession that such is the true theory. The absence of local necessary phenomena goes far to dispute his doctrine. Again, cases of auto-infection, as from decomposed bits of placenta, membranes &c. he fails to explain, placing them under a separate category.

Dr. James Y. Simpson in 1850, by the publication of a paper, succeeded in convincing the profession of the analogy existing between puerperal and surgical fever. Previous to this discovery, Semmelweis of the lying-

-ic hospital at Vienna, asserted that "puerperal patients were chiefly attacked with puerperal fever when they had been examined by the physicians who came fresh from contact with the poison engendered by cadaveric decay," and not dependent upon the fact of the patient having died from some infectious disease. This did not induce him however, to abandon his views upon the subject. He believed first, the sources of infection to arise from the dead body without regard to the nature of the necropsy, from non-puerperal as well as puerperal cases, and secondly, from living patients affected with some disease giving rise to putrefaction of animal tissue; sponges, bed-linen, instruments, the hands, soiled clothing, etc.

atmosphere &c he considers as causes of infection.

The division of this subject may properly be made by placing all cases of self infection, that is by retained placenta, clots, membranes &c under the head of Autogenetic; while those from which the disease has arisen from without, as heterogenetic.

The puerperal state should naturally be the characteristic of healthy function; during which disease should not occur. But when we pause and consider the changes produced in the various organs by the process of gestation, not only in the generative apparatus which of itself would seem sufficient to bring on the natural function, characterized as it is by tension, rupturing &c

beginning from the escape of the ovule from the Graafian follicle, to the tearing away of the placenta, with the rupture of many vessels, we cannot fail to see how prone lying-in women are to disease. But, does this local alteration comprise all? Nay, for Tarnier reminds us that "Science records day by day new facts which lead us to conclude, that, in the pregnant woman there is not a single fibre, or a single drop of fluid which does not undergo some modification".

The blood, modified as it is by the processes of construction and nutrition of the embryo and uterus, becomes charged with an excess of fibrin; a diminution in the proportion of red corpuscles, with an increase [illegible]

white Corpuscles; and waste are visible. These alterations are found prominent at the time of labor; hence therefore the large proportion of cases of dyscrasia be a matter of surprise?

These blood changes, acting as they do upon the body at large, produce ultimately a weakening and lowering of the vitality.

Such then is the condition of the woman at the close of gestation, produced as it is by blood dyscrasia, and fully prepares [illegible] she for infection.

At the end of the second day, the debris from the disintegrated uterus is rapidly becoming absorbed, and should be as rapidly removed. But should the liver and lymphatic system fail to conduct these morbid accumula-tions to the body, these morbid waste stuffs

become noxious. Should these changes not be accomplished however, and these waste stuffs be not excreted pari passu, they must undoubtedly by retention, give rise to harm.

We can therefore see how important it is to accomplish a healthy and active action of the lungs, kidneys and skin: the baneful results of non-conversion and non excretion may ensue, giving rise to a purely endogenetic toxaemia.

But are these all the morbid influences that exert themselves upon the pregnant woman? I think not.

M. Neller in a work on "putrid auto-toxaemia" states the following:

1st That part of the azotized matters contained in the intestines is subjected to

conditions identical with those of their decomposition outside the organism; and that the products of these fermentations are found in the Stools.

2nd That these products pass into the blood, at least in part; that they are subsequently separated by the Kidneys; and that their proportions in the urine may furnish useful information as to the state of the intestinal putrefaction.

3d That all the products which have entered do not reach the Kidneys; and that certain organs are normally charged with the duty of destroying the most hurtful.

4th That under certain circumstances these injurious products are formed or absorbed in too large quantity, and not

destroyed or illuminated in sufficient quantity; and may entail more or less serious disturbances to the health.

Thus we see the retention of faces gives rise to toxic effects, due to the presence of phenol, which, according to Salkowski, has the most injurious effects upon the system. Now, we are well aware, that during parturition constipation is a most troublesome symptom. This alone, would cause no serious effects, provided the liver, and lymphatic symptoms are perfect, and able to combat with them. But generally they are not. This does not show itself as much in the early months as it does at the close of parturition, at which time constipation is a marked symptom,

together with an imperfect antiseptic
injection from the liver [illegible] instance of
function of other organs. This [illegible]
slight component of the component [illegible]
-mia is soon however done away with by the
administration of a purge on the second
or third day, com[illegible] with the adminis[illegible]
-tion of other agents.

The common cause of auto-infection
however, resides in the decomposition [illegible]
impairment of foreign substances such
as portions of placenta, membranes, fetid
lochia.

Wide spread, and more difficult to
reconcile with theory, are the sources of
heterogenetic infection.

Under this form [illegible] we may [illegible]

refer to Cadaveric poisoning, as being foremost in our minds. Semmelweis showed, that in the lying-in hospital at Vienna, attended by physicians who frequented the dissecting rooms and post-mortem, that the mortality from Metria was 1 in 10, while in the departments under the sole control of women, the mortality was never higher than 1 in 34. Means of disinfection being employed, the [illegible] rate of the former at once fell to the latter. Many cases might be adduced to confirm the above. Thus, Simpson relates the experience of a gentleman who had a rapid succession of 5 or 6 cases of Metria, at a time when other practitioners in the same locality were entirely free from it [illegible]

Simpson, who at this time did not believe in its contagious principle, attended the dissection and handled freely the specimens of the Cadaver. The next 4 Cases of Dr. Simpson were attacked with puerperal fever.

On the other hand, contrary results may also be related: thus, Samuel B. Ward, junior demonstrator of the [illegible] College, says: "While I was daily in the dissecting room during the Winter Sessions of the School from 1868-1872, I attended [illegible] cases of confinement, of which I have notes, all of the patients recovered; nor did any of them suffer from any complaints that could be traced to infection."

As another frequent source of heterogenetic infection, may be mentioned [illegible] from

thenia, Erysipelas &c.

In view of the close relationship existing between Surgical Fever and Erysipelas, it is not surprising to discover a similarity between Surgical Fever & Erysipelas and puerperal Septicaemia. By established fact, we are able to demonstrate Erysipelas as also a source of infection for Metria, a case is reported in which the child of a septic caenic patient died from Erysipelas, having been inoculated from the Mother by a slight abrasion produced by the forceps in its extraction. Many other such positive proofs could be stated did our limits admit of further amplification.

The relationship between the Symptomatic diseases and Metria has yet to be

fully & clearly demonstrated before it can
be received universally. Though Dr. P.
Atkinson thinks, that the burden of proof
rests upon those physicians who want to
prove a relationship between scarlatina
and puerperal fever. He reports that it has
been clearly demonstrated on the one hand,
in which the parturient woman has been
the subject of scarlatina, while the symptoms
of puerperal septicaemia were entirely ab-
-sent; while on the other hand, cases in
which the pregnant woman has not only
been confined in the same house with
scarlatina, but in the same room, again
(reported to him by a medical friend) a patient
was attended by a physician who had just
returned from a case of scarlatina

the result of a good Confinement; and no harm resulting to the patient. Still another startling case he reports as follows: a medical friend attended three cases of confinement when his hands were freely peeling from scarlatina, and not one of them was in any way affected by it." On the other hand, Braxton Hicks reports "68 cases of puerperal fever, 37 of which were traced to the scarlatina poison, and in 17, or the the majority, clearly proven [illegible] to the contagion of scarlet fever. Almost none of its usual symptoms, and were not to be distinguished from ordinary typical cases of the so-called puerperal fever."

Upon this subject Dr Robert Barnes thus remarks: "It has been the fashion [illegible]

that Scarlatina in a puerpera, is Scarlatina and nothing more. It is something more. The scarlatina poison finds in the puerperal blood loaded with effete stuff which it cannot excrete, a medium especially favorable to the development of mischief. If this poison enters the puerperal blood its elimination is impossible; the morbid train is fixed; we have developed a form of typhaemia compounded of the auto genetic form pertaining originally and of the scarlatina poison. This is very different from simple scarlatina. In these cases, the characteristic rash and sore throat are wanting. It may be doubted whether the zymotic poison always goes through the successive stages of zym—

-acteristic of the Simple Scarlatina. The poison works in a specific, [illegible] in its special manner. It throws out of order the functional process. It arrests or prevents the disintegrative process, the due absorption by the lymphatics, the purifying action of the lymphatic glands, and [illegible] the excretory function of the lungs, skin and kidneys. Then we get a complex process which cannot be called simple Septicaemia, Pyaemia or Scarlatina, but a compound of all, a species of some indeterminate poison, the product of their interactions."

But, does not the virulence of the disease depend largely upon its mode of introduction? Is it absorbed by the skin or by [illegible]

way, it is fair to suppose that likely its course and severity would be much less than had it been directly inoculated into the system by the genital tract.

Playfair holds, that by the latter means of infection the scarlatinic symptoms are lost, because of its septic action.

Is it then surprising that cases of puerperal septicaemia are so frequent? When we on due reflection consider the uninsure tract open, ready and willing to receive any form of septic matter brought hither by the atmosphere; the hands of physicians, or nurses not properly disinfected; sponge-holders, soiled clothing, water closets &c we dismiss all surprise, & wonder that more cases are not developed.

According to Clark, a careful search of the records of the Health Department of New York City from 1868 to 1875, showed out of 248.533 deaths, 3.342 cases were from diseases complicating pregnancy, more than two-thirds being due to malaria.

Still we have good reason to suppose that a fair proportion of these cases comprised those unaccounted by hygienic influences; cases in which before the period of gestation had begun, the general system was in a wretched condition; all which facts, we must remember before accepting statistics.

But, to hurry on and away from such appalling figures to those of later years, which, if we had, no doubt would show a marked diminution in the mortality

is the vigilant anti septic precautions were taken. Let us glance merely at the course or channel, through which infection is carried. The vaginal mucous membrane lacerated, as it often is, during the process of parturition, together with the placental site, the gapping uterine sinuses, lymphatics and vessels with their extensive proximity to the pelvic viscera, and the irritation caused by the head being in close relation with the uterine mucous membrane, producing a separation ~~from~~ of it from the [illegible] tissue to a certain extent, which gives rise to a tearing of the connecting vessels, and hence the scanty, [illegible] so often [illegible] in [illegible] about the cervix uteri and vagina; all are easily [illegible], [illegible]

(Barnes) From these various states they (bacteria) may pass into the Fallopian tubes, producing salpingitis or ovaritis, and from further progress cellulitis, peritonitis and parametritis. Then still further, it reaches the serous cavities with a result of pleurisy, inflammation of the joints, meningitis &c. But, should they become arrested by the lymphatic glands, the poison may become so altered as to produce no injurious effects, On the other hand however, should the quantity be too large, it may sweep on to the thoracic duct, and thence to the general circulation which event will, in that case, doubtless produce harmful results.

At times we see cases in which the

lochial discharges are extremely offensive, and still no injurious effects follow. How are we to explain this? Was it by the fact, that possibly the lochia contained none of the bacteria which produce fetidity; or that the erosions of the genital tract have healed, thus preventing any injury; for the known absorption must follow very soon after labor, these channels being closed 3 or 4 days subsequent to delivery, that is after the lymphatics have been closed.

We now pass on to the becoming brief consideration of a portion of our subject of paramount importance.

The constant presence of bacteria in infected wounds, [illegible]

in the so-called surgical fever has gone
far to determine the similarity between
surgical fever and putrid septicaemia.
A large quantity of putrid material
if injected into the blood, quickly pro-
duces putrid intoxication. This effect
is nevertheless produced by the presence of
bacteria, as the following experiment of
Koch will show. This observer inject-
ed five drops of putrid blood beneath
the skin of mice with the result of death
in from 4 to 8 hours. These micrococci
bacteria are the same as we have been finding
to distinguish in puerperal fever, and
especially after a chill; one thing we
are not certain of, namely, whether they
act mechanically or produce a poison

Waldyer Orth & others have found in the tissue of the puramatrix, pus-like masses, consisting of pus-cells, but chiefly of bacteria. Might this not be the effusion recognized by old observers? According to Koch, we learn that all bacteria do not act in a similar manner; each producing different results, maintaining however a close connection with the linking diseases, Erysipelas, gangrene and Surgical fever. Strange as it may seem the bacterium termo, and bacterium commune, which produce merely a fetid order, are in themselves harmless, being inoculable. This may serve to explain the hypothesis already mentioned, that fetid lochia may not

itself give rise to serious trouble.

Bacteria act differently on the blood than bacilli. The former, upon coming in contact with the blood (red corpuscles,) causes them to adhere together, forming large clots, and producing a clogging of the capillary circulation. By their action they may enter the serous cavities, producing as before noted, peritonitis, pleurisy, meningitis &c. or becoming detached, they pass on to the heart, and adhering to the valves of the heart produce the so-called endocarditis ulcerosa; puerperal.

The red corpuscles of the blood undergo change of shape, and finally disappear, caused by the penetrating action of the bacteria.

The bacilli on the other hand act

somewhat difficulty. Those which Pasteur names "vibrion pyogénique" cause the blood to assume a semi-gelatinous consistency; while the red corpuscles are not diminished in number, though some-what changed. They produce further, ecchymoses and [illegible] effusions, and a thickening of the intestinal wall.

Having disposed of so important a branch of our subject as the germ theory, we will now consider the symp-toms which characterize the affection. Owing to their diversity this becomes no easy task; for we see that many symptoms occurring in one case may not be found in another. This it may be said is char

-acteristic of any affection, and therefore not peculiar to Metroa. Thus, the disease may assume the pyaemic form, which may continue several weeks and be characterized by recurrent and violent rigors, followed by elevations & remissions of temperature. The skin assumes a yellowish hue. This is but a variety of the affection. Better would it be to consider, first, the general symptoms, which may then be followed by the several local characteristics.

The primary symptom attracting any slight attention is a chill, or chilly sensation, occurring usually in the first four days after delivery; after which day the disease is rare. This is followed

by a rise in the frequency of the pulse, varying from 100 to 140; the thermometer placed in a convenient situation discloses an increase in temperature of 2° or 3°; in severe forms even more, these symptoms are not always pathognomonic of puerpal septicaemia, occurring frequently in the so-called milk-fever.

The disease assuming a more serious character, the pulse increases in frequency, but decreases in strength & volume, varying from 120 to 140 per minute. Low mottering delirium at times occurs; while at others the intellect is not in the slightest deranged. Pain may not be an annoying symptom unless peritonitis sets in. Tympanites from paralysis of the intestines

may be seen, be a most distressing and painful concomitant. Constipation is followed by colliquative diarrhœa and vomiting: the latter often being due to the inflammation extending to the peritoneum covering the stomach, and consisting of dark coffee ground substances or mucous in character. The tongue also shares a part, becoming moist and at times dark and dry, and covered with sordes; while the breath assumes a fœtid odor, with increased perspiration. These symptoms are not seen collectively in all cases. Perforation takes place, which has at first confined to the sides of the uterus, now spreads over the entire abdomen; he comes more rapidly

and of a tearing and colicky character, causing the faces to assume such an appearance that a single glance tells the tale. The dorsal decumbitus is maintained, with the legs well flexed upon the thighs. The abdomen is increased in size, mainly by the accumulation of gases. Hyspnoea at times ensues from the liver being pressed by the swollen bowels against the diaphragm, and necessarily also upon the lungs. The fever usually is preceded by a chill, the temperature rising to 102° or 104° with a marked increase in the frequency of the heart. Cases ending fatally, the pulse becomes more rapid; sweat gathers upon the forehead, the face assumes a [illegible]

and marked depression, the extremities cold, the patient dying in a state of collapse. Should the woman rally, the exudation gathers in circumscribed spots at times becoming encysted round the uterus, drawing that organ high up in the pelvis. Should, as is the case sometimes, the intestines become enclosed by the exudation, suppuration may follow with serious results.

Parametritis and perimetritis are characterized; the former by "moderate fever; pain upon pressure; gaseous distension of the colon, and exudation between the folds of the broad ligament;" while "sharp pain, high fever and tympanitic distension of the lower ~~bowel~~ abdomen," indicates perimetritis. These two affections will

occur together owing to the continuity of tissue.

Chilly sensations or a severe chill precede the fever, followed by a rise of temperature to 103° or 105°, which at times may be only slight in the morning, rising as the evening approaches. Headache and restlessness are usually present, with profuse sweating after the first febrile attack, recurring subsequently during the course of the affection. If it be a case of pure parametritis, the pain may be restricted to the sides of the uterus, though in the usual form colic is severe, subsiding generally after one or two days.

Vomiting occasionally is a symptom, provided the peritoneum covering the uterus

is affected accompanied with diarrhoea.

The fever returning after a week's interval, exudation is rare; while its continuance longer determines the fact upon examination of a tumor of a rounded or flattened form, and its size not larger than an orange.

The pyaemic variety in [illegible] state is characterized by inflammation of the lymphatics, and the following symptoms. Chill followed by a temperature of 104° or more; painless swelling of the abdomen; a red tongue, but slightly, if at all coated; transient patches of erythema, which are sometimes taken for scarlet fever rash, upon the body. Respiration is slight and jerky. Pleurisy and pericarditis [illegible]

together with deformation of the joints, knees shoulders, hips &c.

Treatment;- When once the septic germs have entered the system of a parturient woman, there seems to be with our present knowledge of combatting them, a very meagre chance of recovery. But our duty is to treat all cases to our best ability; and for this reason it would be folly to lay aside all hope, in the belief that nothing can be done. Something may be done; for, notwithstanding the morbid principles have entered the blood, we may sustain the system, so that further beneficial results may be produced; and also to neutralize that as yet unabsorbed by proper antiseptics.

The latter method, comprising [illegible]

use of vaginal and uterine injections is
present a much disputed point. Thus, Dr. T.
Gaillard Thomas protests strongly against
intra-uterine injections, except where symp-
-toms of septicaemia are well marked.
One of the greatest risks is the entrance of
air into the uterine sinuses; also, hemorr-
-hage by dislodging thrombi from the sinuses;
the entrance of fluid into a sinus by a jet of
the injection tube being introduced; and
again direct passage of fluid into the per-
-itoneal cavity through the Fallopian tube.
He overcomes these objections however,
first by the use of a large tube; secondly, by
using warm water; thirdly, by excluding air
before passing the tube to the uterus; and
fourthly, by being extremely careful

intelligent in the operation. Free communi-
-cation should be established from within out, [so] that no fluid may remain in the uterine cavity.

One division of Dr. Thomas treatment, and one which is not yet by no means fully accepted, is the use of an intermittent spray instead of the continuous stream from a fountain syringe; holding that no more danger exists from its use. He however, prefers a steady stream, replacing it by the intermittent one, then [illegible] in [illegible] severe cases. True is it, that the inter-
-mittent spray is by far the best [illegible] means of removing blood clots and [illegible]
-[illegible] from the body of the uterus; but the risk is relatively greater [illegible]

-ducing secondary hemorrhage, but by re-
-moving by the force of the current, fresh granulations covering the abrasions much more readily than the douche.

But are we to fold our arms against the use of uterine and vaginal injections, condemn-
-ing them in bitter terms? Surely such treat-
-ment would be unreasonable when the symptoms of sepsis are inevitable, with death staring us in the face.

In the commencement, or before labor, their use is seldom necessary, doing more harm than good. Their administration is always however employed by Dr. Simpson im-
-mediately after the expulsion of the secun-
-dines, using for the purpose a double can-
-ula tube with an opening at the end for the

purpose of washing the fundus, and 5 have lateral holes. This method appears to be meddlesome; for by no means are they without risk. Dr. C. R. Randolph. [illegible] subject, in the New York Med. Rec. writes "If you have septicaemia, then employ your germicides, and we to think the vagina a fine eater? In the vagina of a woman recently delivered we find often slight granulations. The employment of vaginal injections of simple water has a tendency to arrest granulations and prepare the woman for disease." Cases have been met with, in which the use of warm injections have evidently been continued too long, for after the sinuses have apparently been closed, new channels have be[en]

then use for injection. Then, Barker has noticed that after using the tube for 2 or 3 days it has been withdrawn with patches of fresh blood scattered over it.

There seems however to be some advan-tage in the use of vaginal injections subsequent to delivery, in cases in which it becomes necessary to introduce the hand, to determine the presence of any foreign substances, lesions &c. but even here there is danger of introducing septic matter from the vagina to the previously normal uterus.

From unmistakable evidence the best anti-septic is Corrosive Sublimate, in the proportion of 1:2000 or 1:3000, for the pur-pose of a germ destroyer; but the danger attendant upon its use has been "

profession generally to accept carbolic acid as a much less dangerous germicide, altho' not so effective or permanent. Much care should be exercised in the use of the former remedy, that no fluid remains after its administration in the uterine cavity; for from thence comes serious trouble. Thus the absorption of the antiseptic is a great drawback, producing symptoms of poisoning difficult of detection, due to the masking effects which the puerperal state has over corrosive poison. There is however, hypogastric pain and tenderness with mucous and bloody stools. The urine diminishes in quantity, and contains epithelial cells, casts, and more or less albumen [illegible]

deposits of crystals of oxalate of lime in the uriniferous tubules, due to decalcifi-cation of the bones, which it has been stated arises from the presence of the bichloride; 20 such cases have been reported by Dr. Butte. (Dr. Butte in Brit. Med. Journ. for June 1886.) The smaller quantity used (1:2000, 1:3000,) and in recent practice 1:10,000, of the bichloride of mercury as an external application, has many undeniably good qualities. If, therefore, in such minute solutions it acts locally as a reliable antiseptic, have we not reason to suppose that its internal admin-istration would be characterized by like qualities? Since the remedy would be received into the general circulation

in small quantities; but seeing the extremely weak solutions employed externally with its fair results we may hope that in the future its administration by the mouth may properly be adopted.

Peritonitis must be met by enforcing perfect quiet of the patient, and the administration of full doses of opium; the hypodermic injection being by far the best plan. Turpentine stupes, or warm fomentations, are very soothing and may be employed. Care should be exercised in the administration of purgatives, owing to their uncertain action; and to the possible result of diarrhoea, which exercises an unfavorable termination to peritonitis. Better is it to resort to enemata.

fever is associated with an exhaustion of the nerve centres; an increased amount of tissue waste; and in fact by the deterioration of the whole system. Therefore, one of our main objects in the treatment of puerperal septicaemia, is the reduction of pyrexia. Quinine for this purpose stands among the first. Given at the first administration in doses of from 20-30 gr. the temperature is often perceived to fall several degrees. If at the end of 24 hours the temperature again rises, and all disagreeable symptoms of chinchonism have disappeared, the same dose may be repeated. Instead of its bulky administration by the mouth, a much less disagreeable plan to the patient is

hypodermic method; 20 minims or more of the hydrobromate of quinine being in-jected at each administration.

Next on the list stands a remedy, or rather a collection of remedies, under the name of Warburg's Tinct. This preparation, which has for its basis quinine, and as adjuvants aromatics which appear to increase its effects, has long enjoyed high repute. It at times, with some patients, is not able to be tolerated by the stomach.

The arterial sedative drugs, advocated by Barker, exert their favorable results by modifying cardiac action, which in turn prevents excessive tissue waste. For this purpose Veratrum Viride is always

of 5 gr. of the tincture and the tincture of aconite in 1 gr. doses every half hour, steadily increased may be employed; the pulse falling to 100 or less.

Antipyrine, a new remedy, and one as yet but imperfectly [illegible] is fast gaining ground for the reduction of fever. This drug reduces temperature in a progressive manner, maintaining it at or near the normal level for 6 or 8 hours, or even longer; the [illegible] rise not being attended with sweats or chills. The pulse falls relatively with the decrease of body heat. Sweats and nausea, are almost all its inconveniences, which may be easily overcome in the former by the administration 10

quickly before the first dose, if not given in the latter, by employing the liquid hypodermically, which, however is seldom necessary.

Lusk reports that in all the cases in which Antipyrine has been employed by him, a case of ten per cent has been experienced, but which did not prevent a fatal ending. Probably these cases may have been more of a malarious character, over which Antipyrine has no influence; acting merely as an anti-pyretic, and not as an anti-periodic.

Externally, the cold bath, wet pack, the cold &c are most employed, the former of these is quite ineffective

way of relieving pain: a most convenient manner being the use of Kibbie's Cot. This admirable invention, it is hardly necessary to explain, the reduction of fever following its use is maintained for 4-5 hours, when, if necessary, it may be again resorted to.

Encysted peritoneal effusion, only known by imparting to the hand the feeling of a hard tumor, surrounded by pulpy material, and further determined by the introduction of the aspirator needle should be treated if the pain be complained, treated by the application of a large blister over the seat of uneasiness, which may be aided by the hot vapour douche, warm baths, and flannel to the

abdomen, wrung out in hot water.

Upon the pointing of the abscess, above Poupart's ligament or elsewhere, a free incision should be made, the cavity well washed out twice daily and filled with oakum. By this means the fever and sweat disappear rapidly, with a restoration to health.

Epidemic [illegible]

By

E. E. [illegible]

191.

Epidemic cholera.

Cholera is a disease of which the attacks are very severe and rapidly fatal, it is characterized by copious discharges from alimentary canal, by cramps and extreme exhaustion, also by suppression of urine and other secretions and shrinking of tissues. Epidemic cholera has been known in India for centuries and probably from time immemorial. It is seldom entirely absent there, but at irregular intervals breaks out into wide spread [illegible]. The first known outbreak that specially interests us is that which originated in the Delta Ganges in the year 1817, [illegible] the greater heat of [illegible] and during the [illegible]

to or twelve years confined mainly to the
parts of Asia. In 1829 it reached the [illegible]
It then became temporarily arrested; it
subsequently took a fresh start, and after
travelling slowly westward it appeared in
1831 in European Russia and Poland.
After having reached the northwestern
confines of Europe, the epidemic divided
into two branches, one of which crossed
the Atlantic and appeared on the American
[illegible] 1832, thence spreading itself over the
North American continent; the other
turned southward attacking successively
France, Spain, Italy and the northern coast
of Africa. The disease did not finally
leave Europe until the year 1837. Since
then [illegible] cases, [illegible] the malady that

this infected the whole globe originally in one place and subsequently spread throughout the world or did it generate "de novo" in the different localities where it made its appearance? though there are differences of opinion as to this statement it is quite certain that it originated at first in India where it raged for a certain time in an epidemic form before it assumed an endemic character. In the other places where it appeared from time to time in an epidemic form it never assumed an endemic one. The spread of the disease was always connected with some infected centre from which favourable circumstances facilitated its rapid progress in different directions. The nature of the

[illegible] poison is at present quite unknown, though [illegible] some of which are: (1) Blood poisoning theory of Dr. [illegible] Johnson (2) [illegible] theory of Dr. Bayer (3) Fungus theory of Dr. [illegible] and others (4) The bacillus theory of Dr. [illegible] and his colleagues. [illegible] these theories have been brought forward from time to time yet all are open to [illegible]. It is supposed by most observers that the virus originates in the apeta of an affected person, but how it originates and how it acts or what it is we cannot dogmatically assert, but whatever may be the nature of the person, this disease is unquestionably an infectious one; has a period of incubation varying

[illegible] frequently [illegible]
dejections; sometimes accompanied by
exhaustion, rarely by griping. This is
called cholera diarrhoea. The duration of
[illegible]
few hours to a week; usually about
two days. They may be absent. Occasionally
the prodromata assumes the character of
[illegible] morbus, [illegible] [illegible] ~~more~~
~~prominent~~ and there is little or no faecal
~~to the~~ discharge.

The second stage is characterized by
a profuse diarrhoea generally commencing
in the morning or in the middle of the
[illegible] and the patient [illegible]
dejections as passing from him in a
dream. These painless discharges, sometimes,

after the second evacuation, assume a [illegible] straw coloured appearance. The [illegible] from three to twenty a day, are often ac-[illegible] [illegible] by [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] The thirst is tormenting and constant, the pigment disappears from the stools [illegible] [illegible] [illegible] [illegible] [illegible]; they [illegible] be a [illegible] [illegible] on account of the admixture of blood. The discharges having a whey like appearance consists of the watery elements of the blood; their Sp. g. varies from 1.0 [illegible] and they contain a small proportion of albumen and an excess of sodium chloride, [illegible] [illegible]

attacked. Suppression of the urine is of frequent occurrence at this stage.

The algid stage commences with a fall of temperature; first in the hands, feet, and face, but soon over the whole body. The surface temperature may fall as low as 79°F while the rectal temperature registers 102°. The accompanying sweats make the surface feel colder than it really is; the patient complains of being cold. The skin is in distinct hard folds, and of a bluish tinge; the features are [illegible] pinched, the eyes are deeply sunken, and have lost their usual lustre. The patient is in a state of apathy or stupor; and is only roused by the severe cramps,

which cause him to shriek and throw himself about the bed. These cramps affect chiefly the muscles of the calf of the leg.

In the last portion of this stage called the "collapse" the coldness is constantly increasing; the coldness becomes so marked in the mouth that the thermometer may show a temperature of only 77°F. The lividity and cyanosis, the imperceptible heart sounds, the "[illegible] faint whisper" the sunken eyes, cramps, that now come oftener than at first, complete the dreadful picture of the disease. The vomiting and diarrhoea now diminish and the discharges are less fluid.

The urine is either completely

witnessed, or a few highly albuminous [illegible] are passed. The [illegible] hours are [illegible] with [illegible] intense [illegible]. The stage [illegible] may last forty eight hours, and yet usually [illegible] may occur within a few hours from the most [illegible] condition. The [illegible] consciousness [illegible] the last; I have even heard it stated that insane patients have, in [illegible] their insanity.

The [illegible] is often marked by as speedy a return of favorable [illegible], as was the [illegible] stage by unfavorable ones. The [illegible]

; the heart sounds become distinct and regular, the temperature rises, the dusky look disappears and the symptoms cease. The patient then goes on improving. The duration of this kind varies from one to ten days.

There are several variations. Choleraic typhoid is perhaps the commonest sequela of the algid stage. After a few days or a week of more or less reactive symptoms when the circulation and secretions are fairly established, a quickening of the pulse is noticed and soon a febrile movement is established, which recurs with regular paroxysms. These are accompanied by adynamic symptoms, such as low muttering

delirium, a dry tongue, marked [illegible] and often bedsores. The patient sinks into a state of exhaustion and generally the same degree. The bowels and bladder are involuntarily evacuated and death occurs. If patient recovers the convalescence is very protracted.

Uraemia is a not unfrequent condition following the close of [illegible] and in the [illegible] active stage; and in about [illegible] eight hours the pulse becomes slow, the face slightly flushed and the eyes slightly injected. The urine may be scanty or even entirely suppressed. There is constant headache and sometimes a mild delirium. Epileptiform

convulsions are followed by coma and death. The bowels are constipated and the febrile symptoms negative.

A "Cholera Eruption" so called, sometimes makes its appearance either in stage of reaction or in the typhoid variety. This eruption generally [illegible] the form [illegible], or [illegible] urticaria or roseola. Its appearance is always considered as a favorable symptom. The eruption itches and burns [illegible] and is often accompanied by a burning sensation.

There is a mild form of cholera known as "Cholerine" which is attended by all the characteristic symptoms of the disease, except that there is no algid stage. Recovery is usually rapid.

[illegible] epidemic [illegible] not likely to be mistaken for any other; but when it occurs in isolated cases, it may be confounded with acute poisoning. In acute poisoning there will be [illegible] of the poison [illegible] on the mouth and fingers. The vomiting and [illegible] [illegible] and [illegible] of the ejected matter will detect the presence of poison.

Prognosis.— The mortality [illegible] in different epidemics varies from [illegible] per cent; generally one half recover. The more tense the [illegible] and the more [illegible] the season [illegible] the higher the mortality. The mortality is ~~[illegible]~~ less towards the end than at the commencement of an epidemic; it is

greatest in those under one or over fifty years of age. Habits of life and hygienic surroundings influence the prognosis. Each epidemic in this country has been milder than the preceding.

Treatment.— Prophylactic and hygienic measures limit the duration, extent, and the mortality rate of a cholera epidemic. When an epidemic is pending, general sanitary regulations should be rigorously enforced, and those attacked by the disease should be isolated. Each member of the community should be placed under the best hygienic conditions. All excesses in food and drink and all causes of intestinal irritation should be avoided. A diarrhoea occurring should

be immediately checked.

Soiled clothes, should be removed and burned. The room and the utensils in the sick room should also be thoroughly disinfected, and for this carbolic acid solution is the best thing.

In medicinal treatment, the first object is to control the peristaltic action and this is accomplished by the use of opium, in most cases. It may be combined with nitrate of silver, sulphuric acid, acetate of lead, or with vegetable astringents. It is said that morphine hypodermically at the onset will prevent cholera. The patient should be placed in bed kept warm and [illegible] covered by flannel bandages

If there are signs of exhaustion early stimulants may be given carefully. [illegible] over the stomach and bowels are often serviceable. Nausea is often allayed by cracked ice: carbonic acid water, or effervescing draughts.

[illegible]

the treatment becomes symptomatic.

[illegible]

[illegible] diarrhoea. [illegible]

[illegible] hypodermics of morphia combined with chloral should be given; [illegible] [illegible]. No severe friction will suffice.

In the stage of collapse [illegible] [illegible] in small doses and repeated at short intervals [illegible]

good stimulant; musk [illegible] [illegible] have been recommended. In the use of stimulants one must always be guided by the pulse and the effect of the stimulation. In India the Cholera pill is given during collapse, it being composed of camphor, asafetida, pepper and the essential oils.

As reactionary fever comes on nourishment should be given with good care; a solid diet should not be [illegible] so long as consistent with maintenance of strength. Cerebral symptoms must be promptly treated by ice bags etc. to head, heat to the feet & bromide pot. internally. The surroundings of the patient, cleanliness, calm and even temperature should be maintained.

E. E. T[illegible]

"The Country Doctor"

E. C. Feeish

Session 86-87

11 ..

Introduction

In order that we may more estimate the importance of our subject and the scope of its influence let us glance at the comparative population of the cities of the U.S. and the most distinct including small towns. According to the census of 1880 the population of the U.S. was about 50,000,000 that of the cities alone was about 11,300,000 which is less than one quarter of the entire population. By this we see

that the sanitary interests of more than three fourths of the province are committed to the "country doctor" while those of only one fourth are within the professional influence of the city doctor.

Yet the preparatory discipline of these two characters is the same. They study the same books, attend the same schools and receive the same didactic and clinical instructions by which they arrive at a knowledge of the most common types of the various affections incident to our people. But it is in the

province of text books or schools to enter into the minutiae of the many different manifestations of disease met with under different influences, climatic, social &c. So it becomes the duty of the young physician to make a special study of the various forms of disease peculiar to the section in which he is practicing, and also of the surroundings &c, and the influences which are brought to bear upon his patients. He should not cease to be a student so long as he continues to be a practitioner.

We will consider briefly the different sections of our country as to climatic, social, industrial and other influences affecting the health, mental and physical, and therefore moral, of our people.

In the northern part and near the Eastern shore — in all parts subject to great extremes of temperature and sudden changes we would expect to find catarrhal troubles very prevalent.

In the South, the great interior depression, the river valleys, and in low, flat, damp places miasmatic affections are more

...ment.

As due to social influences we would name - Venereal diseases - which are so common in the city that many physicians make them a specialty, but in rural districts they are but rarely seen.

Alcoholic intemperance - the victims of which the "Country doctor" is not often called to treat, while in larger places the evil is so great that public institutions are required for the care of the unfortunates.

Dietetic difficulties - are to be encountered where the people

are of large means and leisure and given to the excessive indulgence of a morbid appetite the contagious and infectious scourges which necessitate rigid quarantine regulations are only encountered in rural districts by accidental importation.

The industrial influences are as many and as varied as there are different branches of industry. Each branch has certain diseases which are peculiar to the same.

In an agricultural region the doctor has but little surgical

work but if located where there is much manufacturing, railroading, foundries, iron mills heavy machinery &c. he will have an extensive surgical practice. In the country he will not meet with the diseases peculiar to professional mind toilers, nor with those peculiar to military and naval life.

A thorough knowledge of all these various maladies can only be acquired by personal contact with them.

The relation of the general practioner to the specialist is

a question worthy of some consideration at this time as the tendency of the age is toward specialties. It has long since been known that the field of medicine is vastly to large for one man to become proficient in all its branches so men devote their time and means to the pursuit of the separate branches. There are at present specialists in diseases of the Nervous system, throat & chest. Eye & Ear. also venerial diseases. gynecology. diseases of children. surgery. obstetrics. dermatology. toxicology. Exanthematous diseases &c.

There are also some who make pretentions to specialties merely to enlarge their general practice. So we think that if the specialist wishes to be recognized as such by his neighboring general practitioner he should limit his practice to his specialty.

When the general practitioner has treated a case unsuccessfully for a length of time. or if he does not understand the case to his own satisfaction it becomes his duty to his patient and profession to recommend the case to some trust worthy specialist again. If has an delicate op-

erations to perform in which he is not skilful or has not at his command the necessary instruments with which to operate he should refer the patient to one whose ability is recognized and who has provided himself with the necessary appliances.

The demands upon the 'Country doctor' are multitudinous and varied. They necessitate a wide range of research and qualification literary and professional. General and special

He must be physician, pharmacist druggist botanist. Surgeon, general & special, &c.

coucher. Gynecologist public sanitarian gratuitous health officer &c.

The difficulties he must encounter are no less varied & multitudinous than are the demands upon him. And his compensation is but meagre as compared with his weighty responsibilities professional legal social & moral.

First let us notice a few of the difficulties with which he meets. Perhaps the gravest of these is the limited means at his command in emergencies, both medical and surgical

The demand in a small town is not sufficient to justify a druggist in keeping a complete stock on hand so when the physician wants any drug that is not often called for he must wait until it is ordered from some wholesale house.

Surgical practice in the country is not sufficiently extensive to enable the doctor to purchase an adequate set of surgical instruments and he is sometimes necessitated to improvise appliances from crude and imperfect materials.

Another difficulty we would name

The demand in a small town is not sufficient to justify a druggist in taking a complete stock on hand so when the physician wants any thing that is not kept on hand he must wait until it is ordered from some wholesale house.

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in the ignorance of the masses of the people as to physiological laws and hygienic necessities we find the grossest inconsistencies in each of these practices in the vast majority of the people. Many nurses to whom the care of patients are intrusted want to blame both doctor and nurse and will urge their opinions against that of the attending physician. And if they can not see the good effect of the medicine immediately they think it is doing no good and consequently stop its administration. Others are very neg-

ient and indifferent about following the physician's directions and are also very inconsiderate about what they give the patient to eat. Many entertain the idea that the all important point of the treatment is to get the patient to eat and they will give him any thing he can take. Especially is this so during convalescence and not infrequently is the physician summoned in great haste to find that the patient has taken a relapse from some impropriety in eating
again. Nearly every old woman

in the country thinks there is no other doctor so good as hers. and when she visits her sick neighbor she finds fault with the physician in charge of the case. and his treatment and admonishes the friends to discharge him and send for her doctor.

Almost every community has one or more old women who make some pretentions to midwifery whose services if not solicited, are often volunteered.

They of course, get along very well in normal labor where no interference is necessary. but if they meet with any mal-presen-

tation or if any complication
arises they can do nothing. and
after much precious time is
wasted the doctor is summoned
and he arrives to find that the
most favorable time for ma-
nipulation is past and nothing
can be done but to resort to the
use of instruments, possibly to the
destruction of the offspring. or
damage to the maternal struct-
ures - We hail the day when
the ignorant midwife will be
no more in the land.
As other annoyances we might
mention the Patent Nostrum
Vendues. Pretentious Quacks

fortifies by Clerical certificates
Faith Cure Bigots and specious
humbugs generally. The country
is full of them.

The compensation of the country
doctor is but a pittance as
compared with that received by
the city doctor for similar servic-
es. It is entirely out of proportion to the relative expense of
living.

Scarlet Fever

W. H. White

Scarlatina or scarlet fever or scarlet rash meaning a dark red. Is an exanthematous fever called Scarlatina from the color of the eruption is remarkable for the great diversity which it presents in apparent cases as regards symptoms and severity. In its mildest form it is a trivial affection, in its most severe form there are few diseases more appropriately styled malignant. It is generally divided into three forms or varieties, viz Scarlatina Simplex, Scarlatina Anginosa and Scarlatina Maligna. Although they differ widely with respect to gravity and distinctive characters they are not distinct diseases essentially they are identical. Some

however, only divide the disease into mild and severe Scarlatina.

Scarlet Fever is a contagious febrile disease characterized by inflammation of the fauces and a Scarlet rash appearing usually on the second day of fever on the face neck and fauces and progressively spreading over the body and ending in desquamation about the sixth or seventh day.

Scarlatina Simplex This form is distinguished by the absence of throat affections. there are only the fever, and [illegible], redness and some degree of soreness in the fauces are scarcely less common than the eruption itself. The simple variety of Scarlet fever

is often very mild. In some cases the patient is not even confined to bed. The first sign of the disease which attracts attention is usually a scarlet blush upon the face and neck which is attended with a slight febrile movement, and declines on fifth day or sooner. But often it is much more severe there is a universal diffusion of the rash, which is of intense redness; the heat of the skin and frequency of pulse are extreme; and not unfrequently a slight delirium occurs especially during the exacerbations of the fever at night. There may be no rash to any great extent.

Efflorescence ordinarily appears on second day, commences on face and neck and extends over the whole ... in twenty four hours, deepest color where parts are exposed to pressure. Skin is of uniform redness and somewhat rough - not vesicular - it at its worst on about the fourth day and by eighth day generally has disappeared. Skin generally comes off in squamous particles. Tongue is of a red color, papillae elongated and throat is red.

Scarlatina Anginosa -

In this variety the affection of the fauces is prominent. Stiffness of jaw, soreness of throat and pain on swallowing are often experienced at the commencement

of the attack. fever is higher; there is
a throat pain on swallowing, face,
tongue and tonsils are red. Exhibition
exudation very common. may travel to
Larynx and Trachea, and bring on
Laryngitis Croup. Pulse of throat is
sometimes red. Fever high, thirst is
present. In a well marked case the
mucous membrane of the Uvula soft
palate and tonsils is injected having
a bright red appearance, the tonsils are
generally swollen equally and may
nearly meet the secretion of mucous
is increased. frequently a semi purulent
discharge appears from the nose; and
the cervical glands become enlarged and
tender, the tongue is coated with a white

fur of varying thickness and clean from the edges developing the well known strawberry tongue in which the fungiform papillae are engorged and appear to stand out from a smooth, bright red ground. In the more severe cases, the tonsils, uvula and edge of soft palate become covered with a yellowish exudation, ulceration of tonsils cause their surfaces are ragged and perforation may take place through the soft palate, sometimes rash is confined to some particular point, not unfrequently it is in patches with intervening portions of the skin of a natural color. But very many cases also occur in which the rash is nearly or quite general. occasionally after partially

breaking out, it disappears perhaps only to return again after a longer or shorter interval, and this process is sometimes repeated more than once. The fever is higher with more frequent pulse, and a greater tendency to delirium and stupor than in the Simple form. Rash appears first about face and neck but sometimes may be detected on the back of the hand; in a day or two it is nearly always followed by desquamation, but it is important to remember that in mild cases there may be no desquamation at all, and also that children often desquamate after pneumonia, typhoid and other febrile diseases. The inflammation of the fauces advances with the

of the disease. and not unfrequently the eyes are red and irritated though not usually watery as in measles; the patient sometimes sneezes, and has a dry cough and a guttural voice. hemorrhage sometimes from the nose. Upon examination of the fauces the tonsils uvula and soft palate are found to be swollen and of a deep red color - and patches of a concrete exudation resembling false membrane are generally seen upon the surface of the tonsils at an early period of the disease. Along with this internal disease there is almost always more or less swelling of the external parts - in the region of the Parotid and Sub-maxillary Glands - and sometimes the tumefaction

is very great; the external swelling is often hard and painful and sometimes prevents person from opening mouth wide enough to inspect the fauces. Deglutition is difficult and painful, and when attempts are made to swallow liquids they sometimes return through the nostrils. Sometimes the lips are cracked and excoriated here and there with crusts and are painful when touched; Sometimes the mucous membrane of the Nostrils partaker of the disease and the Nasal passages are often closed and the patient is compelled to breathe through the mouth alone producing dryness of the tongue and lips. At a more advanced stage a yellow and exceedingly offensive

pus is occasionally discharged from the nostrils. Occasionally the inflammation travels back through the Eustachian tube into the cavity of the tympanum, causing unpleasant symptoms. The fading of the eruption begins a little later than in the simple form, and the fever and sore throat often continue in some degree for a few days after the commencement of desquamation. Various secondary affections are apt to occur which protract the disease and add much to its danger. The mildest forms are often attended with disastrous sequelae, and may be due to their not taking care of themselves during convalescence.

Scarlatina Maligna - In this variety the fever is of a Typhus character - exhibits it self early. Brain becomes affected. Rash appears and disappears irregularly, eyes suffused and dim, tongue dark and dry, or red and glossy fetid breath Cervical Gland. swollen and may suppurate, exhausting Diarrhoea may set in, Hemorrhage often c... Patient may die on 3rd. day, yet may get well - children may die in convulsions before eruption. Scarlet Fever may exist without the eruption occurring at all. The name of Malignant Scarlet fever is applied to certain cases of extreme violence in which the system ...

one overwhelmed by the force of the disease, or is made very weak or depraved by it; either the Simple or Anginose form may offer this character, the affection of the throat not being essential to the malignancy of the disease though this part often suffers greatly. In some instances the patient is completely overcome in the first stage and may die upon 2nd. or 3rd. day. In other cases where there is greater energy of the system, or less violence of the cause. The early symptoms are those of the Angina variety. The signs from which the malignancy may be suspected are violent initial pains in the loins, and extremities, a greater tendency to stupor and delirium a somewhat weaker

though not less frequent pulse, a later appearance of the eruption which may be postponed to the 4th day, and its tendency to a darker hue. in the fauces also the tint of the redness is deeper and more inclining to purple than in the Sthenic Anginose cases. As the disease advances the symptoms assume a more decided Typhus character the pulse becomes feeble, the skin is less regularly heated, the eruption disappears or turns of a livid or purplish color, petechia and ecchymosis occasionally appear, the exudation of the throat and fauces is of a dark color, deep ulceration or gangrene of parts may occur.

Clinical History - Incubation - Scarlet Fever

is developed after a shorter period of incubation than measles. the average duration is from 3 to 5 days it has been known to be only 24 or 40 hours. Not very infrequently the duration is from 6 to 8 days and in rare instances it may extend to 12 or 14 days; the duration is more variable than in the other eruptive fevers.

Stage of Invasion – The invasion in Scarlet fever is usually sudden, a chill occurring in only a certain number of cases. In children vomiting is a very common symptom at the onset. Fever more or less is rapidly developed, the temperature may rise at once to 105° or higher; Epistaxis is not uncommon; the frequency of pulse corresponds to the intensity of the fever; restlessness, headache

sometimes delirium, and general malaise are marked if there be notable pyrexia.

In mild cases all these symptoms may be slight; Redness of the fauces more or less acute may generally be observed in this stage either with or without a sense of soreness and pain on swallowing. The injection of the throat is due to the efflorescences which appear in this situation before the appearance on the skin; In a great majority of cases the fauces present the appearance of Erythematous inflammation, this associated with suddenly developed high fever and vomiting points to Scarlet fever especially in a child and if the disease be prevalent. In mild cases even a knowledge diagnosis can hardly be made.

fever to the stage of eruption. The average duration of this stage is about 24 hours; the eruption usually occurs on the 2nd. day. A considerable delay of the eruption is generally attributable to some complication.

Stage of Eruption:- In Scarlet fever the efflorescence appears usually on the neck and chest simultaneously with its appearance on the face; in the latter situation it appears on the cheeks and temples, leaving the skin around the mouth unaffected; it extends rapidly over the trunk and extremities, in this respect differing from the eruption in Small Pox and Measles; The general diffusion takes place usually within 24 hours; Instances in which it appears

on the trunk and limbs before the appearance on the face and neck are not extremely rare; the eruption is at first in the form of minute spots, these by coalescence form patches variable as regards number and size, or the whole body may be covered with an efflorescence. The patches have irregular or serrated borders, the color is a bright red, hence name Scarlet fever. The patches of efflorescence show on close observation, numerous points of a deeper color, which are the sites of the primary discrete macules. The eruption disappears usually within three or four days; The duration of this stage of eruption however is not very rarely considerably longer; it may extend even to the fourteenth day.

Miliary vesicles are not uncommon; the affection of the fauces continues; the tonsils are generally more or less enlarged and the mucous surface may be coated with a muco-purulent, or a pultaceous matter, the latter resembling an exudation. A true diphtheritic exudation sometimes occurs. With this appearance within the throat, the Submaxillary and Lymphatic glands at the angle of the jaw are enlarged. The tongue in some cases presents an appearance which is highly diagnostic - the papillae are enlarged, and, if the surface of the tongue be coated, they project through the coating, and present an appearance as if the surface had been sprinkled with Cay-

some pepper. If not scaled the appearance of the tongue is still more characteristic. It resembles closely a ripe strawberry and is commonly known as the Strawberry tongue; the appearance is peculiar to this disease, and the diagnosis might almost be based upon this alone. Pyrexia more or less intense continues through this stage, gradual defervescence in favorable cases commencing at its close. The degree is generally a criterion of the severity of the disease. In severe cases the delirium is common and is active, patients requiring to be watched or restrained in order to prevent their escaping out of doors and sometimes from jumping out of the windows.

Stage of Desquamation frequently com-
mences with the decline of the eruption and
pairs to its disappearance. The degree and
extent of the desquamation is, in general,
proportionate to the intensity and diffu-
sion of the efflorescence - desquamation
is rarely wanting, save in the cases in
which the efflorescence fails to appear.
In Scarlet fever desquamation is the rule
with some exceptions. It may be fur-
furaceous, but it is oftener lamellar, that
is, the cuticle is exfoliated entire in
portions of greater or less size.
The cuticle of the hands may sometimes be
removed intact, peeling off like a glove.
Desquamation may take place where the
eruption had been wanting. A second

efflorescence not infrequently takes place in the stage of desquamation, and a second desquamation without a renewal of the efflorescence sometimes occurs.

Complications and Sequels of Scarlet Fever. There are few, if any diseases the mildest and severest cases of which are so widely apart as those of Scarlet fever, and, perhaps in no other disease are deviations from a typical course more common. The terms mild, severe and malignant Scarlet fever are convenient for grouping irregular forms of the disease. Cases are sometimes so mild - that the patient does not go to bed, perhaps manifesting no illness, the inflammation of the fauces slight and the eruption so indistinct that the

diagnosis is difficult, and sometimes an after conclusion based on the communication of the disease to others or the occurrence of Nephritis as a sequel. Faucial inflammation without an eruption is not uncommon. There may be on the one hand considerable, and on the other little or no fever. Persons who have once had Scarlet fever, or those whose susceptibility to the contagium has diminished by age often have more or less affection of the throat when brought in contact with cases of the disease. In contrast to these mild cases irregular forms are those in which the deviations denote severity of the disease. Notable hyper-pyrexia and frequency of the pulse characterize malignant cases. In some cases

convulsions occur, irrespective of renal disease attributable to the intensity of the topical condition of the blood. Active delirium occurs in some cases. The faucial affection not infrequently is much greater than in typical cases; the tonsils are greatly enlarged; they may suppurate and sloughing sometimes ensues. In cases of an unusual affection of the throat the cervical glands are often very much enlarged and gangrene may occur. The eruption in these cases is often incompletely developed or wanting.

The hemorrhagic form in which hemorrhage takes place in different situations other than in the skin may be considered as malignant; in this form there is usually a

high temperature and grave cerebral symptoms. Of the complications of Scarlet fever the most frequent are Otitis, either external or internal, leading sometimes to destruction of the tymkanum and the discharge of the ossicles of the ear; Colo-Enteritis in children; Articular Rheumatism, Peritonitis, Pleuritis, Endocarditis and Pericarditis - these affections probably in many if not in most cases either Rheumatic or Uraemic; Laryngitis which may prove the immediate cause of death; Coryza Ophthalmia and Gangrene of the mouth. Diphtheria is not infrequently combined with Scarlet fever; the presence of a Diphtheritic exudation in the Pharynx is an evidence of the

coexistence of the two diseases. the exudation here, as in other instances is to be distinguished from the pultaceous secretion from the follicles and the deposit of concrete mucous, which may give rise to an appearance resembling that of a pseudo-membrane. Parenchymatous or tubal Nephritis is sometimes a complication giving rise in certain cases to Coma and Convulsions etc; it is much oftener a Sequel. It follows Scarlet Fever in so many instances, and is so rare except in this pathological connection that its occurrence serves to establish in some cases the diagnosis when this had been doubtful. With reference to the liability to this complication

the urine should be examined daily during the course of the disease; the presence of Albumen or Casts is evidence of the renal complication. To determine whether a sufficient amount of urea is eliminated to protect against the grave effects of uraemia, the quantity and specific gravity should be ascertained daily - attention should be given to the urine for several weeks after the date of the convalescence, sufficiently to determine either the existence or absence of the Nephritic sequel. It is to be borne in mind that this sequel may follow the mildest as well as the more severe cases, perhaps occurring more frequently after the former than

after the latter. Parenchymatous Nephritis following Scarlet fever may occasion anasarca. or phenomena attributable to Uraemia may take place without as well as with general Dropsy. Coma and convulsions with pulmonary oedema oedema of the Glottis, pericarditis or other serous inflammations are uraemic affections which may destroy life after patients have passed safely through the fever. In order to foresee and forestall these grave effects of Uraemia, it is of great importance to keep watch over the urine as regards quantity and Specific gravity. It is a good precaution to watch the urine of persons who have been exposed to

Scarlatinous poison, although Scarlet fever be not produced. That the poison will cause parenchymatous Nephritis without causing Scarlet fever is certain.

Anatomical Characters - Sometimes every trace of eruption disappears after death, sometimes remains & it may be seen in purplish or livid spots; upon cutting into the skin, the reticular tissue is found reddened and injected. The redness sometimes also disappears from the [illegible] death. The concrete exudations are often seen, sometimes extending through the pharynx even to the Oesophagus, but seldom into the larynx. The tendency to Bronchial and Pulmonary inflammation is much less in this disease than in

measles, except internal organs are congested - Alimentary mucous membrane often exhibits signs of inflammation and Peyer's patches and the Solitary follicles of the intestine are often moderately swollen. The Spleen has often been found enlarged. Swelling and inflammation of the lymphatic glands of neck often occur; the glands may suppurate. Swelling of Mesenteric glands as well as other lymphatic glands of body has also been observed. Fatty metamorphosis of the liver kidneys and heart may occur. Eruption on surface and appearance of the throat constitute principal anatomical characters.

Cause of Scarlet fever is probably

specific and is generally believed to be of a contagious nature, the contagion from mild cases is as effective as that from severe cases. The contagion is contained in emanations from the body, probably in both expired breath and the cutaneous exhalations, hence the atmosphere surrounding patients is infected. That the disease may be communicated by means of fomites is unquestionable. This contagion may be carried in clothes etc. from one person or place to another and this contagion hold its morbific power for a long time. Scarlatina sometimes follows with notable frequency surgical operations. The disease prevails at all seasons of the year - it frequently occurs epidemically

As a general rule the disease occurs but once in the same individual, exceptions have now and then been noticed. No age is entirely exempt from the disease, but children are much more liable to it than is adults. Statistics show that the disease occurs most frequently in the 3rd. and 4th. years of life. and that the liability to it diminishes progressively after the fifth year, and becomes very small after 40 years. Cases have been reported in which the disease was contracted in utero. Many persons exposed are often troubled with sore throat, yet escape the disease. Thought to be due to Minute Organisms and microscopic fungi ??

Diagnosis of Scarlet fever before the

eruption is quite difficult to make sometimes, but a probable diagnosis may be made before the eruption appears on the skin, by a sudden attack of vomiting with high fever, and redness of fauces in a young subject, especially if during prevalence of Scarlet fever. But from the short duration of stage of invasion the high fever, the appearance of efflorescence in the throat before the eruption on skin then appearance of efflorescence on body and upper extremities, before or simultaneously with its appearance on neck and face and rapid extension over cutaneous surface, the Scarlet color, the irregular and serrated margins of patches and the persistence of

increase of the pyrexia after appearance of efflorescence - the eruption occurring on 2nd. day, often sudden attacks of vomiting etc make the diagnosis of Scarlet fever quite plain, later on we have the strawberry tongue. In Measles the eruption begins on the 4th. day; the eruption of measles begins on the forehead and neck, then face and gradually extends downwards, occupying from 24 to 36 hours in passing over trunk and limbs. The eruption of measles first in Measles as indistinct red points, very small, which increase in size and become more distinct, their borders are uneven or irregular, they become slightly elevated and tend to arrange

themselves in circular or crescentic forms. Color of eruption is dull or deep red, not crimson or scarlet red like in Scarlet fever. In Measles there is Coryza, irritability of the eyes, sneezing, coughing etc.. While in Variola the eruption changes from Macular to papular to Vesicular to pustular and characteristic appearance of the Small Pox vesicle is produced by a central depression on its roof; this depression constitutes the so called Umbilication of the vesicle. Scarlet fever may be at first or in slight cases confounded with Rozeola, but this is a slight affection and generally disappears in from 24 to 48 hours and has not symptoms

of Scarlet fever. A little time will generally make the diagnosis very plain.

Prognosis. There is probably no complaint in which the result is more uncertain than in this disease. The seemingly mildest cases sometimes assume a most malignant character, and patients suddenly die. While, conversely cases apparently the most desperate sometimes end favorably. Aside from the intensity of the disease the danger often depends on complications. The symptoms denoting imminent danger from intensity of the disease are excessively frequent pulse, active delirium and prostration, Jactita-

tion. hyper-pyrexia, the mode of dying in these cases being by Asthenia. If throat affection is unusually severe the prognosis is unfavorable. If Laryngitis ensue a fatal result is to be expected. The development of diphtheria is extremely unfavorable; Among unfavorable signs are a late appearance of, considerable deficiency in or sudden retrocession of the eruption, with other bad symptoms as continued delirium, or profound Coma, a livid or purple color of the rash, with petechia, ecchymosis or hemorrhage. a livid appearance of the fauces, with gangrenous sloughs or ulcers; extension of

pseudo membranous exudation into the larynx etc.. More dangerous in adults than children. The more Typhoid like the attack the more dangerous. Hemorrhagic form is bad. Generally dangerous in pregnancy Best and safest not to give any favorable prognosis.

Treatment. It has been shown that Scarlet fever cannot be cut short or its course abridged. We should therefore pursue the expectant plan of treatment, that is treat the symptoms as they present themselves, there is no known remedy which can destroy the poison when once it gets into the system. Those substances which are highly esteemed as disinfectants cannot be used with safety

in sufficient dose to antagonize the poison in the system, since such doses would serious by impair the nutrition and molecular action in the tissues. Simple forms of Scarlet fever require little more than hygienic treatment, and there are no indications for active treatment. the fever is light or moderate. there are few if any, symptoms which call for palliative measures. always best to keep patient in bed, give laxative, no exposure, good hygiene. if any fever give some antipyretic and little else need be done in the very mild cases as they tend to get well of their own accord. Be careful in preventing a spread of the disease, remember that a very mild case is able to transmit the disease and bring on malignant form.

Also watch during convalescence a complications very liable to set in. While in cases of extreme severity they offer little in the way of encouragement from any treatment. The tendency to a fatal result can not sometimes be prevented by any remedy; yet you should try all remedies to stop the disease. (f the cases in which there is more or less severity, often the great danger is from hyperpyrexia. We should use Anti-pyretics, as Quina, in full doses, as Quinine is of great importance in reducing the temperature of body in the fever. You may use the wet sheet, or the cold bath has been used, also sponging the patient is of great importance. if the pyrexia be considerable or moderate spong-

ing the body with cold or tepid water will suffice. the sponging is to be continued and repeated according to its effect. The wet pack reduces the fever and has a sedative effect; the patient may remain in the pack for about an hour or two, free perspiration is induced. the pack is to be removed when this effect is produced the body wiped dry and placed in bed. and it may be repeated pro re nata. The evidences of its usefulness are reduction of the body heat, diminution in the frequency of the pulse and a manifest soothing effect, and patient often obtains refreshing sleep after it is done several times, the patient often will like it so much that will call for it. Anodynes are indicated if restlessness

and vigilance be not relieved by sponging and the wet pack; Opium in some form given cautiously is of use if the effect otherwise be good by promoting moisture of the skin. Dover's powder acts nicely many prefer to use Belladonna Hyoscyamus, Chloral etc. if these are not efficacious opiates are to be given but cautiously in young children. As a stimulant Carbonate of Ammonia acts well. Inunction of the surface is a highly useful measure, especially when pruritis is present as a symptom it gives great comfort to the patient by relieving the dryness of the skin etc.; and it prevents the detachment from the skin of the epidermic particles containing the contagion in a dry state;

especially during the period of Desquamation will it prevent their detachment from the skin. Cold cream ointment and vaseline are to be preferred to lard or olive oil Glycerine with rose water ach well; The pulse becomes less frequent and the temperature diminishes not infrequently after the inunction. you may repeat it two or three times a day - it need not conflict with sponging, the wet sheet, or wet pack. Cathartics are never to be used. If constipated relieve by enema; all remedies which disturb the Stomach are contraindicated. In severe cases denoting Asthenia, alimentary and alcoholic support is an important part of the treatment. The best form

of nourishment is milk with the addition of lime water. Milk punch and Wine whey are best alcoholic preparations for children. The amount of alcohol to be given is to be determined by yourself.
If the disease be accompanied with much affection of the throat this claims treatment. Chlorate of Potash acts well - ʒj to ʒij may be given daily. Carbolic acid, Chlorate of Potash. Glycerine and lime water acts well; most any of gargles or applications act well. ʒj of Cod liver oil passed over the inflamed part acts well.
If there be diphtheritic exudation use gargles - Sprays or mops of something as Liquor Potassae, lime water, Tinct. Ferri Chloridi, Chlorate Potash and aquae

combined act well etc. If there is pain of breath, the insufflation of Pulverized Salicylate Acid and Subnitrat. Bismuthi act well. Externally compresses kept wet with cold water may do good. Some advise ice to outside [illegible]. If Glandular swellings occur paint with Iodine - if suppurative inflammation ensue poulticer or the water dressings should be applied - Otitis and Opthalmia if present require appropiate local treatment in order to prevent permanent impairment of sight or hearing. Arthritic inflammation which is usually mild is to be treated by the application of Anodyne Linaments and bandaging. Convulsions are generally due to uraemia

but occuring early in young children, they may be incident to the developement of the disease without denoting a renal complication. Whether Uraemic or otherwise if they continue, the inhalation of Chloroform is indicated; it has given immediate relief and recoveries have often followed. Uraemic phenomena in addition to convulsions, namely Cephalalgia disturbance of vision and coma render prompt measures of treatment exceedingly important. Saline purgatives or Elaterium are to be employed at once to eliminate urea, and diaphoresis should if possible be produced by the use of the warm or hot air bath, the wet sheet or the hypodermic injection of

the Muriate of Pilocarpin; Vomiting and purging should always suggest the inquiry whether they be not due to uraemia, and if so, they are not to be arrested; Albumenuria and especially a deficiency of urea in the urine should lead to measures with a view of forestalling the effects of uraemia.
Fomentations are to be applied over the loins; the bowels are to be kept open with Saline laxatives and diaphoresis is to be produced. Ergot is thought by some to act well in Albuminuria. If there be a tendency to suppression of urine Colchicum acts well.
As the symptoms present themselves so give your remedies; as if fever

give anti pyretics; if weak and depressed give stimulants etc. and treat complications as they arise. The sequels of Scarlet fever should be guarded against by proper precautions and not letting patient expose self to cold, or be imprudent in eating and drinking and not over-exert mind or body. And thus by paying attention to good hygienic precautions one may ward off the sequelae of Scarlet feiver. Though should they occur they should be treated properly.

Malarial Haematinuria

The prime desideratum in the nomenclature of a disease being that the name shall, as nearly as may be possible be expressive of the pathological condition existing and of the data indicated, I have almost been deterred from making an attempt to write my thesis on the disease which I shall consider in the following pages; since in the perusal of the literature upon the subject I find such diversity of opinion as to the designation by which it shall be known its etiology, pathology, morbid anatomy, treatment &c, among men more mature years, more extended and more observations than I have made; however, this an age of adventure, futile

in experiments and daring in their application; an age of mental activity and intellectual independence; an age in which the "Marcus dixit ita est" paraphrased: "Did Marcus say twas fact? then fact it is; no proof so valid as a word of his" has been left in the past — has played out. Among the many designatives by this affection has been known in the numerous writings upon the subject are the following; Hemorrhagic Malarial Fever, Green Jaundice, Black Jaundice, Miasmatic Haematuria, Cachaemia Hemorrhagica, Icterode Pernicious Fever, Malignant Congestive Fever, Yellow Remittent Fever, Interior Yellow Fever,

Purpuramic Fever, Yellow Disease, Canebrake Yellow Fever, Swamp Yellow Fever &c. With this brilliant and formidable array of names, it would seem that some one of them might settled upon by the Profession. Though in our present state of ignorance of its true pathology such seems too much of an undertaking. Now, as the name which I purpose to suggest for the affection will only add one more to the already long Nosological list which is found in the annals of American Medical Literature, I take it may be pardoned for this single addition. The name which I propose is Haematinuria suggested by the result of an analy-

sis of urine made by Prof. Councilman of Balti. Md. and numerous other similar results obtained by efficient pathologists.

History —

As far as I have been able to ascertain it was unknown in the United States prior to the Autumn of 1867 — all authorities whose writings I have had opportunity to examine concur in this statement, save alone Dr. R. A. Gardner, of Centreville Florida who wrote as follows: — heading his article "Malarial Cachexia" — He says, "How long the disease under consideration has been in existence I will not undertake to say not having attempted to trace it

to its origin; but I have no doubt that it has occurred at times ever since man has had a being, and has been subjected to the causes calculated to disturb it. I do not agree with those who think it a disease of recent origin. That it has been much with more frequency in this country than elsewhere I will not deny and that too within comparatively few years. The first case known to the "oldest inhabitants," as far as I have been able to ascertain occurred in 1848 in Thomas County, Florida, near the Georgia line, the subject being a Methodist Minister on Leon Circuit. Why it should have been confined to this County so long

and became of common occurrence while other parts of this state and other states were comparatively free from it. I am not able to say and why it has within a very few years enlarged its field of operation I am unable to answer". Within the last decade or two it has been quite prevalent in the states bordering on the Atlantic Coast of Maryland, in the Gulf States and those of the Mississippi Valley as far north as Md. The first case reported in North Carolina occurred in the Autumn of 1872.

Pathology —

In writing of the Pathology of this disease one is confronted by the discourage-

ing thought that the elucidation of the various interesting points connected with it has never been made absolutely certain; though the most interesting task which can engage the attention of the medical Conference who enjoy opportunity for its study and those who by the necessary series of careful observations of the clinical history of the disease and the examination of the blood, urine and organs, shall complete our acquaintance with this new enemy, so full of terrible interest, will receive the hearty thanks of the Profession and an honorable distinction. Here, as in many other instances therapy has gone in advance of

pathology, the true principles of treatment being better established than the history and rationale of the pathogenic phenomena; but from the fact that haematin is constantly found in the urine of one thus affected it seems that the theory which has been suggested of the bacteria acting directly upon the red blood corpuscles and in some obscure way effecting disintegration of them, setting free the haematin which under the high pressure in the renal vessels, due to the congestion of these organs, makes its escape through the uriniferous tubules, whence into the bladder and is discharged in the urine, seems quite plausible.

Further, to show that the change takes place in the blood, we find the serum filling a blister containing haemin but no discs in tact, and eyes stained orange colour. —
As it is not purpose to consider fully the history and pathology of a disease to which I can contribute so little to their elucidation I resist the temptation to dwell on the many interesting points which strongly invite discussion. A few words however in relation to one of the most ... of these, viz. the real cause of jaundice which appears ... duly, while the liver is ... out bile in profusion, and no discoverable obstacle exists to its

free passage into the alimentary canal, from which it is abundantly discharged both by vomiting and purging — the greater amount in the former way. Theoretically it might seem to be due to the reabsorption of the superabundant bilious secretion from the stomach, intestines and ducts themselves, even though there be no apparent obstacle to its flow; to compression of the bile ducts by the congested liver and thus creating a partial obstruction, so that while much bile passes through there a portion of the excessive secretion is reabsorbed; to the production of bile pigment in the blood more rapidly than it can be thrown

out by the actively secreting liver; to a disturbance of the hepatic circulation, attended with increased blood pressure on the side of the hepatic artery and portal vein & diminished pressure on the side of the hepatic veins, which would naturally cause a portion of the bile to be taken up by the radicles of these vessels from the secreting structure of the liver and conveyed to the tissues through the general circulation; to hæmatin which has undergone spontaneous changes in the circulation, such as we see in the yellow rings or shadings which appear with subcutaneous extravasation of blood. But [illegible]

haps the true key to this problem, certainly that which seems best to accord with the phenomena of the disease, may be found in the following passage from Niemeyer's chapter on "Haematogenic icterus." "The views regarding the occurrence of jaundice without retention and reabsorption of bile have totally changed since the observations of Virchow and Kuhne have shown that bile coloring matter may be formed from the fluid coloring matter of the blood without the action of the liver, and that we may induce artificial jaundice in an animal by injecting substances that will dissolve the blood corpuscles. There is now no doubt

that some of the formerly enigmatical forms of icterus are due to the disintegration of blood corpuscles, and the transformation of the blood coloring matter into bile coloring matter. This is particularly true of those cases of icterus occasionally caused by poisoning from Chloroform or Ether; for as experiment proves these substances possess the power of dissolving blood corpuscles. The mode of origin is very probable, though not absolutely proved. For other forms of jaundice may be accounted for in the way as that occurring after snake-bites, that observed constantly in yellow fever, quite often in recurrent (relapsing) fever, septi-

caunia and puerperal fever and more rarely in other infectious diseases and acute diseases accompanied by severe fever". The destructive action of the "malarial poison" upon the blood discs being admitted, and if we admit that under such intense and concentrated action of the morbific agent, as that which induces an attack of Malarial haematinuria — the destructive action being rapid and extensive — the applicability of the above views to the production of icterus occurring in this form of disease becomes at once obvious and the relationship between that symptom and the haematinuria receives important elucidation. We are in-

debted to Prof. Joseph Jones, of New Orleans, for the first pathological descriptions of the kidneys in those who succumbed to H. disease. He has, he thinks, worked out the true pathology and has illustrated his description with lithographs, which, if not executed in a high style of art, bring forcibly to the mind the gross appearances of the kidneys. He says, "When sections were made of the kidneys of those who had died in the acute stages of malarial haematuria, the cortical and medullary portions presented a deep purplish-red and bloody appearance. The color was deeper in some portions than in others, resembling circumscribed effusion of dark

blood. In many cases all portions of the kidney were altered in appearance and the tubuli uriniferi, especially at the termination of the pyramids could be seen, resembling dark lines of coagulated blood. Microscopical examination of sections, with Valentine's knife, revealed the fact that many of the tubuli uriniferi throughout their entire extent, were filled with coagulated blood. The hemorrhage appears to have taken place through the Malpighian tufts chiefly; still on no blood was effused around the tubuli uriniferi. It would appear that during the prolonged cold stage the kidneys became congested in a manner similar to that which occurs

in the spleen. During this congestion rupture of the blood vessels of Bowman's capsule occurs; such rupture being mainly due to their anatomical structure and the acute tension of the walls due to increased blood pressure. When from any cause blood coagulates in the tubuli uriniferi their function as excretory tubes is destroyed and the extent of their impairment of their function must also be in a direct ratio to the gravity of the case. The grand cause of the severe dangerous and often fatal character of Malarial haematinuria will be found chiefly in the structural alterations of the kidneys. The rupture in this form of disease is ex-

ceedingly superficial generally giving the appearance in some cases of tumeric staining applied with a brush to the surface. Points of puncture with a hypodermic Needle and abrasions of any kind will be found stained yellow or lemon colored.

Etiology —

As diversified as is medical opinion upon other points, all seem to concur in the belief that it is of Malarial origin, so to speak.

Dignosis —

This form of Malaria differs merely in degree from the ordinary Intermittent and Remittent Fevers, save in the icteric discoloration of the tissues, carmine discoloration of

the mind & some find points in pathology. Having seen one case one would commit an unpardonable wrong by failing to recognize a second, as characteristic are the physical signs.

Prognosis —

The prognosis is always grave, though it is dependent in some degree upon the skill and experience of the physician and upon the power of the patient to withstand the depressing effects of the disease — there being some cases which prove rapidly fatal when in the hands of the most skillful practitioner. ——

Treatment —

The three salient points in the treat-

ment are (a) the prevention of the return of the paroxysm (b) the quieting of the stomach and (c) the support of the patient. The patient should be brought speedily under the influence of guinine, which is preferably administered hypodermically as soon as you see the patient, and then, if the stomach will retain it, you should give by the mouth large doses for four or five days or you may continue throughout the attack to use it hypodermically if nausea and vomiting persist. This done the first indication for treatment will be met. The second indication for treatment should be met with a blister over the epigas-

trium and a laxative of the following composition:

℞

For a single dose
- Hydrargyri chloridi mitis gr. v
- Pulvis Rhei gr. v
- Sodii Bicarbonatis gr. ix
- Acidi Carbolici gr. i

Ft. into pills —

Further indications for treatment should be met by measures which the exigencies of the particular case may demand. The diet should be nutricious and prepared in the manner best tolerated by the stomach of the patient. When the paroxysms have been arrested and convalescence established a tonic of Iron, Quinine and Nux Vomica will be advantageously given

I hereby append a synopsis of the last case of the disease treated by my father, a physician of 32 years experience and who, living a section in which it has occurred more or less frequently in the Autumn of each year since 1872, has treated quite a number of cases of this disease, and at my request has furnished me with the following.

Minnie A. — aet. 12 — a blonde — had enjoyed good health from birth to time attack in August 1886; was well developed for a girl of her age the daughter of a farmer who had during the Winter before built a residence in the midst of the woods and distant four or five hundred

yards from a large Mill Land covering several hundred acres of land, Elk came and killed the trees and turned up the soil all around the town. To the north of the town the distance of a hundred yards is an open field which extended to the borders of the pond. Several members of the Family suffered from intermittent fever of a mild type during the Autumn. Minnie had had four or five attacks at irregular intervals from August to December 1886. Each attack was temporarily arrested by quinine which was purchased and tendered by her father, a man of but limited attainments. On the 17th of December at 1 P.M. she had a chill which last-

ed three or four hours. At 5 P.M. her mother discovered the dark Port-wine-looking urine so characteristic of the disease. Her father came for me at 7 P.M. — Being unwell and the weather very cold I did not go at night — but sent the medicine, pills containing sulphate of Quinine 48 gr. and directed eight grains to be given every two hours until forty-eight grains had been taken. Said the case at 10 A.M. on Dec. 18th — all the pills had been taken and retained with the exception of one dose. Surface of patient and the conjunctivae of a deep icteric hue — much nausea but very little vomiting as yet — very weak and restless — bowels torpid

tongue coated from tip to base with a thick greenish fur — temperature 103½°F. — pulse 110, [illegible] — loud bellows murmur over cardiac region — a grain of quinine was given and the quinine continued in diminished doses — [illegible] over epigastric region. Left the case at 10 A.M. on the 19th. — Bowels moved twice — nausea not so great — temperature 100 — pulse 100 — skin perspirable — blister discharging freely yellow serum — repeated the capsules — and continued the quinine in small doses. At 10 A.M. on the 20th found the vesicle free of the surface rapidly disappearing — urine much lighter in color — Nausea and restlessness gone — Fever gone —

patient more cheerful — appetite returning & took some nourishment with relish. On the afternoon of the 20th. urine lost all blood appearance and was rather of a milky appearance. On the 21st all symptoms much improved — On 22nd Patient discharged urine as clear as spring water — complexion as fair as before attack — appetite and digestion good — bowels regular — She was given a ferruginous tonic — Convalescence went on steadily and rapidly. She has been at school since the middle of January and now looks as well as she ever did. Two other cases of this disease alluded in my practice in the Autumn of '86, were

treated in a similar manner and made similar speedy recovery. — The following are the results obtained by Prof. Councilman of Balto., Md. in the analysis of four specimens of urine collected from Minnie A. on consecutive days of her attack:

(1) Urine passed on first day was red, of a dilute carmine color, containing very little sediment. Examination with Nitric acid, showed abundance of albumin. Examination with microscope showed no red blood corpuscles. At bottom of bottle there was a slightly brownish layer which appeared to be merely mucous. By heat, acetic acid

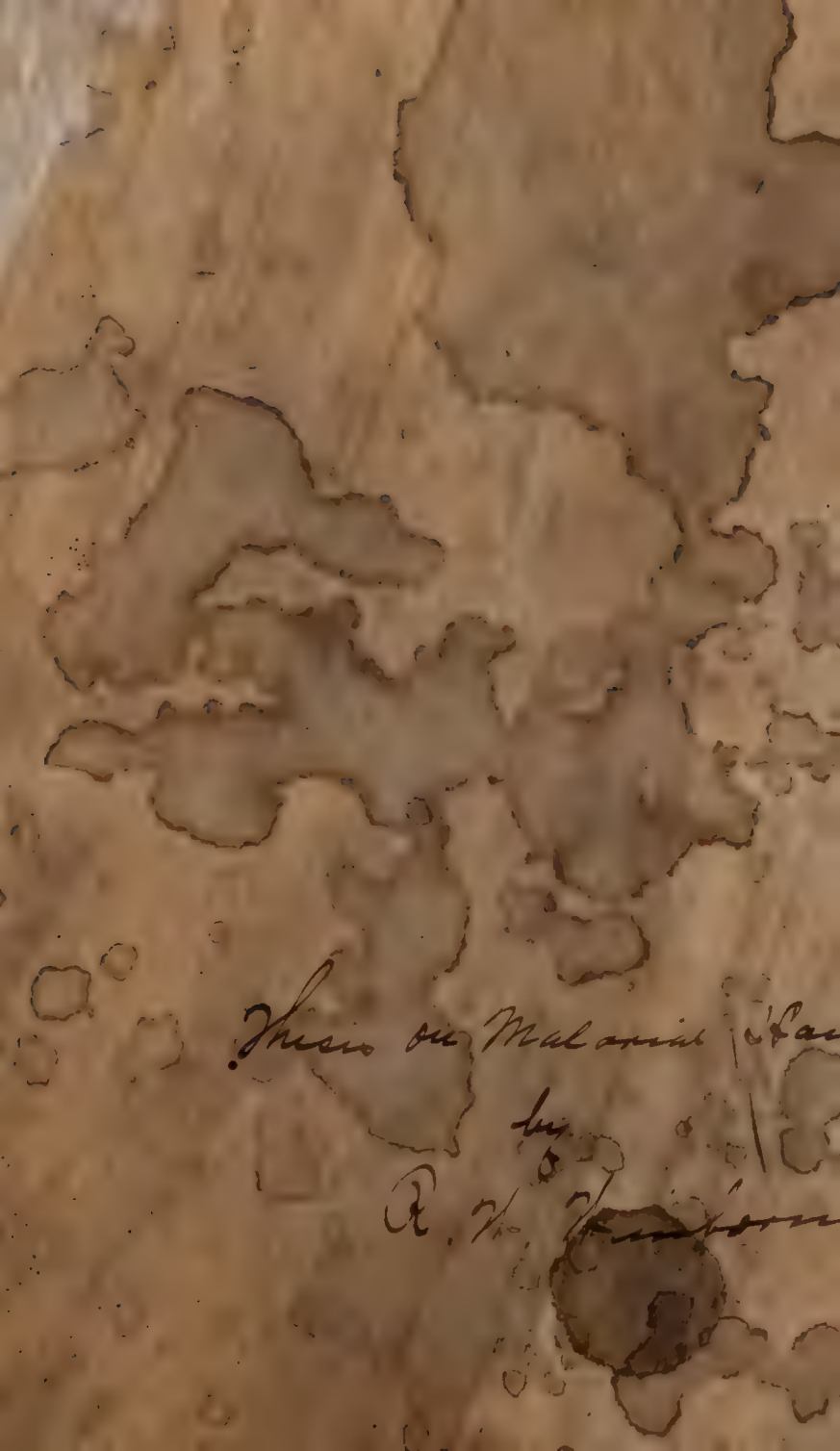
and Chloride of Sodium numerous crystals of Lanalin were found.

(2) Urine on second day transparent very much redder than that of first day, contained but slight amount of sediment. Examination of which gave similar results - Lanalin crystals being found but no red blood corpuscles.

(3) Urine of third day differed but little save in the amount of sediment, which was in excess and which contained some kidney epithelium

(4) Urine of fourth day was (like contained a large amount of albumin, hyaline and epithelial casts.

Thesis on Miarial Hæmatinuria
by
Robt. W. Wanborn of N.J.



FEB 16 1942

The dean's office states that
this man failed to graduate
from the University of Maryland,
College of Physicians & Surgeons
or
Baltimore Medical College.

Ruth Lee Briscoe.
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Univ. Maryland
Feb. 14 - 1887 - Class 86-87

Gonorrhoea

Gonorrhoea more commonly called Clap is a contagious inflamation of the genital organs of both sexes. It usually makes its appearance from the fourth to the Eighth day after exposure but this time may vary. The first symptoms are tickling and stinging of the Urethra its lips become swollen & red. Also a slight mucus discharge will make its apearance. After a few days the Urethra will become painful on Micturition which pain in many cases becomes very severe. Patient may also pass two or more separate streams

which is due to the irregular contracted state of the urethra the size of the stream is also diminished. the discharge becomes more abundant and of a yellow color and is often mixed with blood. this disease spreads along the canal and may set up inflamation of the Glans & O the glands in the groins are often affected and become swollen and painful which is aggravated by walking or in any way taking violent exercise. Painful erections often occur in which the penis is sometimes curved downward and also may be curved to one side, the testicles often become involved and become tender and very painful

The urinary organs may become affected causing retention or partial retention of the urine which causes most extreme pain The bladder may also become involved causing patient to pass water frequently as much as very hour and with great pain & the unfortunate one suffering from this complicated state of affairs The testicles of men & the ovaries of women often occurs. The perineum is often attacked with shooting pains which causes tickling about the anus. The groins are often swollen and tender upon pressure. The glands (Symptoms) may become swollen causing the bubo which may or may not go on to

suppuration. Phimosis may occur but is not very frequently seen. Hemorrage from urethra may occur causing great alarm on part of patient - but can be easily stopped by pressure. After abatement of the Inflamatory stage abates if not cured a muco purulent discharge remains which is very much aggravated by use of alcohol the abundant use of tobacco should also be suspended When a thin obstinate discharge is present it has passed into a stage called Gleet which in many cases is never cured. In such cases stricture should be suspected and treated as such

In women it is called Specific Vaginitis in which case it attacks the Vulva, vagina + urethra, causing inflamation of these organs which contagion causes a discharge like that of male Gonnorhea the Patient has a scalding sensation on the passage of urine great pain and heat in the vagina severe pelvic pains are often if not always present. The purulent matter when allowed to remain in the vagina makes it intensely sore and tender to the touch by its action on the mucus membrane It also cause a great amount

of mucro purulent matter
to be secreted which if
unchecked goes on from bad
to worse and may go so
far as to produce Pelvic Peritonitis,
abscess of the vulva, Bubo and
in some cases has been known
to run patients system so as to
be the cause of death. But
fortunately it generally limits
itself to the less important
organs the Urethra Vagina and
Vulva the pus in these cases
is of a thick yellowish white
color and if patient be careless
and get some of the matter in
his or her eyes it may set
up Gonnorhoeal inflamation

in Purulent Opthalmia which is
a very mischievous and dangerous
eye trouble therefore
patient should be cautioned
against dirty finger nail dirty
towels and also keep things
separate from rest of family
as the poison is readily commu-
nicated from one patient to
another. can also of gonorhoea
if properly and carefully treated
may be cured in from ten
days to two weeks. but may
run on for a much longer
time as much as it has been
known to last years. in both
males & females with a continued
flow of muco purulent matter

It is supposed by some to be non cured and if cured at all in a very few cases which may at any time break forth in its most active form and under the life of a woman miserable whose husband has previously had gonorrhoea. Some authors say these women rarely produce children and if they do only one. and that gonorrhoea causes a great many abortions but this is to a certain degree disproved if this would be true a healthy woman would be hard to find or to say the least for the larger portion of woman would not be

healthy. After an attack of Gonorrhoea, rheumatism often follows which is said by some to be due to the copaiba always given in this affection but this is not the case as rheumatism has been known to follow when no copaiba had been administered during the whole attack. If stricture be present it should be treated by repeated dilatations with large bougie also look after patients general health as this state may go on from bad to worse and finally result in uremic poisoning or irritative fever. but stricture is not apt to occur in first

Want of Gonorrhea. The treatment
of Gonorrhea should be commenced with the use of mild injections Bowels should be kept open.
In acute stage use mild injections into the urethra which should be thrown in slowly and gently. Strong solutions often set up more mischief than they do good and therefore should not be used. The weak solution should be used frequently through the day and if care is taken No use whatever of alcoholic liquors. Excessive smoking should be suspended. Please that the patient may eat the other short in from three six days

If patient cannot sleep it should be procured in all cases by the use of anodynes. If the patient suffers from pain in the perineum and great pain when urinating leeches or blisters applied to the Perineum may be of great service. After acute stage has subsided the remedies for retinal use are copaiba Cubeb and oil of Sandal wood. Balsam copaiba and Cubebs are often combined. also is Ol Sandal wood Cubebs and Copaiba but these agents should not be used in acute stage. The application of cold water or ice will often relieve painful-

retention or Chordee. If Patient take one drop of the Tincture of Cantharides, he will have no Chordee Hemorrage from the urethra may be checked by the application of cold and pressure but hemorrage does not occur in the larger number of these cases. Sulph Zinc is a good injection made in the strength of one grain to the oz of water a few grs of soluble extract of opium may also be added. Another good injection is Subcarbonate of Zinc. Gum acacia. Sub nitrate Bismuth a water the object of the Bismuth is to protect the urethra from the scalding effects of the

urine. If it runs on to gleet the tincture of Chloride of Iron may be of great use, especially if the patient be weak & anemic give it in ten or fifteen grain doses three times a day well diluted in water after meals. Gleet may also be treated by repeated dilatation by large Bougies but often the Injection of Sub Nitrate of Bismuth a dram to oz of water with sulphate of zinc will suffice. Golden seal or Hydrastis canadenthis one ounce to pint of water is highly recommended by some practitioners.

p Cholera Infantum 1st

I have been induced to select for the Subject of the Thesis which I propose writing, the disease named above, both because of its universality in almost every town & city of the United States, And the painful prominence it has attained as one of the most fatal diseases to which childhood is heir, It is difficult and I fear impossible as yet to name its most favored locality, Since its ravages are experienced alike, on the Atlantic border, the Pacific slope, the Cities and towns bordering the Gulf of Mexico and the Lakes of the North, Although it may be safely asserted that its greatest activity is exerted in latitudes of hot and varying temperature, Before I make any attempt to define the aetiology of, or prescribe the

the proper treatment for this dis-
ease I must beg leave to state
that to do so correctly or satisfac-
torily would require longer
experience, and a greater talent
for observation than I possess,
and as I feel confident
that any opinion or speculation
of mine will be as useless as
it might be unnecessary or even
useless, shall confine myself
to the discussion of such facts
and circumstances as have
fallen under my own immedi-
ate observation or gleaned
from the teachings of my honor-
ed Preceptors.

Cholera Infantum usually
makes its appearance about the
beginning of summer, and
last until the decline of
fall although its greatest
intensity is during August
& September, So prevalent is
this disease in my native city
(Richmond Va) during the Months
named above, that it seems as

not Contagious, to be at least
Epidemic, the age from
one year to four or six, chil-
dren are most liable to be
attacked, and as a general
rule it makes its attack very
gradually, Manifesting itself
by irregularity of the bowels,
which as the disease progresses
settles at last into a most ob-
stinate and persistent diarrhoea
If however this condition of
the bowels, were the only mani-
festation of the trouble Cholera
Infantum would be robbed of
its horrors but unfortunately
other symptoms soon appear,
the Child becomes fretful, its
lips are dry, its hands feet &
head are hot; the face flushed
the pulse rapid, and the tongue
red, as a general rule during a
slight chill precedes this condition
After one or two days the fever
hitherto had been constant, perceptibly
loses that feature, & now assumes
the [illegible], If an ordinary

intermittent fever, complicated however by frequent watery stools [illegible], great thirst and most persistent vomiting, the matter ejected from the stomach is very seldom other than undigested food, or the [illegible] taken to assuage the burning constant thirst, while the discharge from the bowels are sometimes more or less bilious, sometimes tinged with blood or mucus, and at others resembling the washings of bacon to which they have been most aptly compared, this state of the bowels often persist with such inveteracy as speedily to reduce a hitherto strong & healthy child to the most alarming condition of emaciation, and when it is remembered that there exist at the same time such an irritable condition of the stomach, as that no particle of diet can be retained for a sufficient length of time to afford any nutriment

to the system, it will at once
be seen why this disease should
be the instrument of hurrying
such multitudes of children to
early graves.

In treating of the causes of
this disease, I am aware of
the fact that great diversity
of opinion exist, some assign
as the most potent factor in
its production, the relaxation
of the system resulting from
the extreme heat of summer,
Others again with equal ingen-
uity of argument & plausibil-
ity of theory, ascribe as its
cause irregularity of diet, either
as respects its quantity or qual-
ity, or both, In some instances
it may arise from exposure to
cold, as when sudden variation
of temperature occur, thereby
driving the blood from the sur-
face & giving rise to more or
less internal congestion, a condi-
tion favorable to the production
of the disease.

A few years ago Prof O. S. [illegible] Munson of the Medical College of Va, in an article upon this subject urged with intrepid logic, and I think with almost convincing reasoning its close affinity to autumnal remittent fever, at least that they were referable to the same cause. (Malaria) It may be safely assumed perhaps that all of the causes which I have named, lend a helping hand to produce this disease. It cannot be doubted I think that the condition of the atmosphere where Cholera Infantum flourishes most exerts no inconsiderable influence in its propagation, In pure air where ventilation and cleanliness are attended to, it rarely extends beyond the individual in whom it first originates but in a vitiated atmosphere, loaded with noxious effluvia

as the secretions of the human
body, especially where many
persons are crowded together
in small apartments. Cholera
Infantum communicates itself
to great numbers of those chil-
dren who may be exposed to its
influence, No other proof I think
is necessary to establish that vitiated
that vitiated atmosphere exerts a
powerful influence in causing
the disease, than that it is
rarely found to flourish
elsewhere than amidst the
urban population;
In the treatment of this dis-
ease our first effort should
would be directed
to the control of the general
febrile excitement, and thereby
to remove the irritations of the
intestinal canal, Hence it
would be proper to administer
the small doses of Calomel in
Combination with Opium and
Bicarbonate of Soda, with the
view of [illegible] from the

Alimentary Canal all offending matter, and at the same time to lift the blockade of congestion from the liver & portal circulation, When the bowels by these methods have been thoroughly evacuated, If the fever continues, small doses of Liq. Amm. Acetatis with Spts of Nitre may with great advantage be given for the purpose of inducing perspiration and determining the blood to the surface of the body, Should the temperature reach a high point the best method of reducing it would be a bath, temperature from 75° to 85° & repeated. Should the fever again rise sufficiently high to require it, Should the fever be characterized by periodical exacerbations & remissions, Quinine would seem to be the agent capable of producing the best and most prompt results, to be administered during the intermissions or remissions as the case may be

and combined with small
doses of Dovers powder,
should it induce undue
excitement of the pulse, or
seem to exert a deleterious
influence upon the bowels,
as I believe to be the case,
When by the methods indi
cated, the fever shall have
been controlled, Stimulants
may be given in the form
of Brandy, Whiskey &c. in
small doses & properly de-
luted for the purpose of build-
ing up the system, But
should the irritations of
the intestinal canal ~~to~~
continue after the febrile
symptoms have been re
moved, Chalk mixture in
combination with the alkaline
syrup of Rheubarb & cam-
phorated tincture of Opium
would no doubt be most
advantageously prescribed,
In cases where the diarrhoea
is attended with [illegible]

severe gripings, and the Alvine discharges are tinged with blood, as not unfrequently happens, small injections composed of starch or mucilage of acacia, with Laudanum are more effectual in relieving the sufferings of the child, than anodynes administered by the stomach, while they are less apt to disturb the functions of that organ. Conditions may however arise where it may be necessary to resort to astringent remedies & powerful one too to prevent the patient from dying from exhaustion resulting from the repeated and copious discharges from the bowels, The most reliable remedy when this condition exist, is Tanic acid & glycerine or aromatic Sulphuric acid given at intervals of a few hours, For that most distr ing

Complication and almost constant concomitant of this disease, excessive irritability of the stomach, causing the almost instantaneous ejection of every article of food or medicine, a formidable array of medicines are recommended by their various advocates, among which may be mentioned as deserving of trial, if not commendation Ice in shavings, or in champaigne, small doses of calomel, lime water & milk, Sub nitrate of Bismuth combined with pepsine, Oxalate of Cerium, All rational methods should be tried before abandoning the case as hopeless,

The diet in the treatment of Cholera Infantum is of prime importance, since it plays such an important part in its cause as well as cure, In early infancy milk should take the first rank,

and it should be fresh
and pure & if not readily
digested and assimilated, it
should be tried boiled &
peptonized which renders it
more digestible & readily as-
similated, But in cases
where the stomach cannot
be made to retain food, the
same may be administered
per rectum by being pre-
viously prepared, Millers food
is a comparatively new prep-
aration which seems to com-
mand, as well as deserve, the
highest place in the estima-
tion of Physicians, Valentines
meat-juice is said to exert
a most benign influence
upon the Stomach, In short-
the diet should be selected
with a view to its concentration,
as well as freedom from all
ingredients liable to excessive
fermentation, at the same time
it should be of such a na-
ture as to render it easy of

digestion and assimilation.
But of all the remedies prescribed, either for the purpose of preventing, or of curing this disease, there are none perhaps so effectual as a removal to the cool & pure air of the country, particularly near the Sea shore, The atmosphere is not only cooler, but in a peculiar manner restores the appetite and strength of the patient.

It will be observed that in the writing of this article, I have attempted to avoid the error of didactic or authoritative assertion of either fact or theory, because fully conscious that I must long remain a student, ere I can hope to become a teacher of those hidden and sublime truths, which are only "revealed to the wise and prudent", Since earnest and honest

For the acquirement
of this knowledge, I
Enter the shrine of your
University, and after listen-
ing to the words of wisdom
& truth which have char-
acterized the teachings
of my honored preceptors,
I feel confident that by
close application I may some
day obtain it-

E. G. Woodson

Thesis
by C. G. Woodson
Cholera Infantum
1887

Acute Rheumatism

Thesis

by

George B. Young

Feb 14th, 1887

Acute Rheumatism

The usual course in commencing a Thesis is, I believe, to give an accurate, scientific diffuntion of the malady chosen for its subject and a brief account of its causes. This is generally not difficult for the student has ~~generally~~ but to consult some standard medical dictionary, copy the statements there made and then proceed ~~with~~ in his work with the calm satisfaction that if, as is probably the case, the Faculty read but the obtaining lines of his essay they will be sufficiently impressed with his

[illegible]dition - In the case of my chosen subject, however, this ready method will not answer - That rheumatism is an acute inflammatory manifestation of a constitutional state seems to be the usual view but as to what that constitutional state may be, or what its cause there is the greatest diversity of opinion. Most commonly it is [illegible] to some [illegible] material [illegible] [illegible]lation in the [illegible], One of the [illegible]diate products of tissue change which, owing to some interference with the nutritive and eliminative processes, accumulates in [illegible] body - This

[illegible] [illegible] to be [illegible] by
the fact that many diseases which
impair nutrition, seem to ~~[illegible]~~
[illegible] towards rheumatism, and
[illegible] acid [illegible] — prolonged lac-
tation, hepatic disorder &c, ~~[illegible]~~
On the other hand we have the
fact that this disease is most com-
mon during middle age, [illegible] in
old age — altho the same cause
act upon the organism when the
powers of resistance are [illegible]
[illegible] upon [illegible] — rheumatism
is comparatively rare — [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] the [illegible] [illegible] [illegible]

[illegible] whole — [illegible] observers hold that the changes in [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] influences sent from the [illegible] [illegible] filaments to the trophic centers — Dr Harkin of Belfast [illegible] it to be due to "a specific [illegible] of [illegible] [illegible] origin;" — Mr [illegible] is quoted by Roberts as holding that rheumatism is — "in the main a liability to joint disease, brought about by exposure to cold and wet, through reflex nervous influences;" — Dr Weir Mitchell has shown that conditions very sim-

to acute rheumatism one produced by injuries to nerves and still other observers have ascribed the disease to that popular scape goat for our ignorance - a germ. Those who hold to the view that the disease is due to accumulation of some morbific material in the blood embrace the largest part of the profession and the material in question is usually held to be lactic acid; [illegible] some have held it to an excess of sulphur while others say it is a variation in the normal proportion of blood salts. The lactic acid theory is supported by the fact that lactic acid is one

the chief results of acid indigestion and the subject of the forms of gastric disturbance are particularly liable to rheumatism - Again - the production of lactic acid is increased by active muscular exercise & its elimination is checked by a sudden chilling; while clinical experience teaches that attacks of rheumatism are frequently liable to follow chilling after exercise -

In addition to the foregoing and the fact that in rheumatism the blood is less alkaline than is normal it is urged that the experimental injection of lactic acid will produce endocarditis

This latter statement has, however, been contradicted of late by Kühne and others – Whatever the cause of the disease it seems certain that a marked hereditary tendency often exists and that living in damp or badly drained localities or exposure to cold increases the liability to it – It has however been pointed out by Bartholow that the disease is very frequent on the high dry table lands of New Mexico and I have myself seen a good deal of it in the mountainous regions of Colorado in an atmosphere singularly clear & dry –

Morbid Anatomy

The statements about this wi

-merous as the views on causation. The blood is diminished in viscosity, coagulates with great rapidity, contains an increased % of fibrin and a diminished number of red corpuscles. — The synovial membranes of the affected joints are usually infiltrated to a greater or less degree, the joint fluid is increased in amount and often thickened by flocculi of lymph or fibrin and in [illegible] of changes in the membranes, cartilages are seen in the [illegible] extremities of the bones [illegible] are described by different observers but Loomis states that in

some cases - either the swelling has
been gradual [illegible] very evident -
or [illegible] can be noticed after
death -

<u>Symptoms</u>

There are usually a variety of premoni-
tory symptoms. Sometimes such as
a feeling of uneasiness or restless-
ness - a feeling of weakness, dys-
peptic symptoms, singular [illegible]
feelings in the joints about to
be affected etc. There may be
slight painful disturbance for a
day ~~before~~ [illegible] to onset of
the joint trouble [illegible]
a neuralgic pain occurring in
some important [illegible] - [illegible]

occurs with or generally preceded by a chill or succession of chilly sensations, accompanied by a moderate rise of temperature. There are also a coated tongue, anorexia, constipation and thirst. The feeling of soreness in the joint first involved is succeeded by an acute pain – They will usually, tho' not always, be swollen, red and hot, and fluctuation can sometimes be made out in them – The pain increases until the patient will sometimes scream at the thought of being approached or touched – The ankle joint is usually first involved, then the

knee, elbow &c. The hip and fingers are less frequently affected and the spine, toes slower jaw [illegible] frequently of all. The [illegible] is often remarkably symmetrical in its progress — jumping from one ankle to the other, from one knee to the other and may return to the first point of attack after having made the circuit of the other articulations. The most conspicuous symptom is the high temperature. This range usually 101°-102°, rarely exceeding 104°-105° but occasionally going to 107° or over. The pulse rate is often above the normal ratio to temperature, due prob-

-ably to the pain - The fever may remit from time to time but a complete intermission is a bad sign as it is apt to be followed by a relapse or increase in the violence of all the symptoms. The fever terminates by lysis rarely by crisis and a return to complete defervescence is seldom reached. Oftentimes rises very high and the disease rapidly proceeds to a fatal termination. The diaphoresis is very frequent the sweats having an acid smell and reaction and as a result of this sudamina are often present. The urine is scanty - high coloured strongly acid and loaded with

urates — It may contain a little albumen. Sometimes there are eruptions such as Herpes, Urticaria, Miliaria &c. — There are most insomnia and restlessness but except in drunkards very little delirium. Its presence in those not hard drinkers is usually a grave symptom —

Diagnosis

The diagnosis is not at all difficult [illegible] 2nd [illegible] in failing to examine [illegible] of [illegible] — The [illegible] with which it might be confounded are Gout - Pyaemia and the Arthritic troubles of Urethral Fever — It is readily distinguished from Gout by the fever

and sweats & in a complicated case by the cardiac symptoms - In Pyaemia you would probably have the history of some focus of suppuration - the irregular sweating, ~~and~~ the sweet smelling breath, the recurrent chills and the symptoms of jaundice. An attack of rheumatism might co-exist with an urethral discharge and thus complicate the diagnosis but the differentiation should easily be made by remembering the uni-articular character of urethral fever and the absence in it of high temperature

Course - Duration - Complications and Terminations

Rheumatism has a natural ten-

duney to recovery if left alone but it can not be called a self limited disease in the sense of being to termination within any given time. The duration in uncomplicated cases depends on the number of joints involved, the power of resistance of the individual, the method of treatment &c. The first attack is usually longer than the subsequent ones, lasting from two to six weeks with an average of between three and four weeks, from one case and from one to three, with an average of two in the latter. The disease is very capricious. Some cases with the best of care and

only involving a joint or two will hang on for weeks while others left to themselves get well in from fifteen to twenty one days. Sometimes the symptoms recur with increased violence just when convalescence seems assured, or the fever may subside and the [illegible] persist. — The [illegible] rate in uncomplicated cases is said to be only 5 % and the injury to joints a very [illegible] [illegible] — The great dangers to be feared are the [illegible] complications, other complications such as pleurisy, pneumonia [illegible] meningitis may [illegible] the [illegible] [illegible]

are vastly more important, both from their greater frequency and the danger of permanent injury to the valvular apparatus. Endocarditis - Pericarditis - Myocarditis and even Ulcerative Endocarditis may occur at any time during the course of the disease and may even antedate the appearance of joint troubles - [illegible] [illegible] [illegible] as to the frequency of [illegible] complication, some say that five to seven, others from fifty to seventy five o/o are so affected. It would seem that the o/o is higher in hospital than in private practice and in youth than in more ad[illegible]

[illegible] of these complications is the same as when they occur separately, the great dangers being the injuries to the valves in Endo-Carditis, the very profuse effusion in Pericarditis or the delayed absorption of a slight effusion when of course in [illegible] [illegible] Carditis death with [illegible] [illegible] [illegible] [illegible] [illegible] sequelae of rheumatism is coma but no explanation seems to have attempted of its [illegible] of production - When death does occur in an uncomplicated case of rheumatism it is due to the hyperpyrexia and it seems

of observers pin their faith on the alkaline treatment, another on the salicylates or iron. One say the patient should be kept "between sheets, rather cool", another says [illegible] [illegible] [illegible] [illegible] the pain but tends to lessen the chance of complications and change the reaction of the urine, others admit the [illegible] of the [illegible] but deny the other good effects — [illegible] [illegible] [illegible] [illegible] extended experience has [illegible] [illegible] many of their pretensions — the

with the same means - The scope

suitable -

- The patient should be protected from draughts; the affected joints wrapped in cotton wool or bathed with menthol, camphorated

the diet limited to liquid food, especially milk, until convalescence [illegible] well established [illegible] the tendency to complication controlled.

7) The stout but flabby class of patients the alkaline plan of treatment seems to give the best results — The salicylates are adapted to the strong and robust class of patients but it should be noted that after reducing the [illegible] temperature by large doses the drug should be continued in smaller doses to obviate the tendency to relapse. The [illegible] plan is especially fitted in the young [illegible]

[illegible] - [illegible] the of
[illegible] methods may be used the
application of [illegible] blisters
around, but not immediately
upon the part - Opium or
morphine should be used in
sufficient quantity to control
the [illegible] and [illegible]
[illegible] the cold
[illegible]
[illegible] be systemat-
ically examine for the [illegible]
of complications which [illegible]
be treated appropriately - [illegible]
the [illegible] - [illegible]
be taken [illegible]
to avoid exposure to cold -

bowels should be moved freely and the greatest care taken with the diet which should be gradually increased to normal.

Very respectfully
Geo. W. Young

Thesis

Acute Lobar-Pneumonia

James A. Tapp

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Baltimore Md.

1887.

Lobar Pneumonia

Acute Lobar Pneumonia is a constitutional disease with a local inflammation of lung tissue, characterized by hyperaemia or over accumulation of blood. The exudation from the pulmonary blood vessels and bronchial arteries fill up the alveoli and ultimate bronchi as to render them impervious to air, and bring about such a condition called hepitazation. It occurs most frequently in the lower part of right lung, next in frequency in the lower part of left lung, next in apex of right lung and last in frequency in apex of left lung. It may involve one lobe or a whole lung or both lungs.

y. Latter form does not occur in more than 12 %. and is followed by the greatest mortality. It is more frequent in Senile than in adult life.

Aetiology.- Its true cause is not yet thoroughly determined. Among the predisposing causes it is ascertained that age comes first, and the periods of life in which this disease is most common are three in number viz Early childhood, 2nd between the ages of 20 and 40 years, and in old age, say after 60 years. 90 % all deaths after 75 years are said to be from pneumonia, as regards sex both male and female are equally attacked under the age of 3 years. Between the years of 20 and 40 the disease

in males predominate, some say in proportion of 2 to 1 others from 3 to 1. After the age of 60 years there is a remission among males, females being nearly as susceptible to it as males. It seems that no peculiar avocation predisposes one to this disease, but a larger percent of those [illegible] are engaged in out door work and are subjected to all conditions of weather are subject to it than those whose work is in-doors, which shows that cold and dampness and the general vicissitudes of weather have some effect in producing it. The strong and the weak are equally liable to it. Poverty, bad atmosphere and unhygienic conditions generally are some causes that produce it.

Continued pulmonary hyperaemia either from heart trouble or from hypostasis cause it, It may be brought on by injury to the chest, or shock from traumatic fever. It is not known whether alcohol acts directly in producing it, or whether it may not be the result of abuse, or exposure to cold, dampness &c., which is more or less incident to intemperance or debauchery. Cold it is said does not increase the rate of pneumonia except in the old. The extremes of temperature has very much less influence than a changeable one, hence it is said to be more prevalent during the months of March and April than any others. Flint records 49 cases in

Buffalo N. Y. occurring during the months of the year as follows: "Jany. 9, Feby. 2, March 13, April 9, May 3, June 3, July 3, Aug. 0, Sept. 2, Oct. 1, Nov. 1, Decr. 5," He also says: "The disease occurs in the Middle and Southern States much oftener than in the Northern. It prevails much more in some years than in others. In Sections of the Southern States it prevails at times sufficiently to be called an epidemic. It is emphatically the prevalent disease during the winter months in these states, and affecting especially the Negro population. It is a severer disease in the Southern section of the country than at the North, being more liable to extend beyond

a single rule, and proving fatal in a large number of cases. In a large proportion of cases of acute pneumonia the disease is developed spontaneously. Journal says: "Its Aetiology shows that it is a disease predisposed to by all things that depress the vital powers. Children and the aged are and especially depressed by the intense cold of winter, and the chilling winds of March and April, in Europe it is often called the May Epidemic.

Pneumonia is common in the temperate regions. Elevation above the sea seems to predispose to it. It is in hot and cold climates. North and East winds seem to favor its development. Rainy seasons do not influence the

the pneumonia rate to any appreciable degree, nor do damp or marshy districts, but both have a marked influence over Bronchitis and other local pulmonary diseases. It is a well established fact that pneumonia occurs oftener among the poor than the rich, the private soldier than the officer, the sailor on shore than on ship, the soldier oftener than the civilian at the same military post. All these are explained by by the better hygienic surroundings of the one class than the other."

Morbid Anatomy: Anatomically the changes in the lungs are of 4 kinds viz; 1st Congestion or Engorgement, 2nd Consolidation or Red Hepatization

2nd Gray Hepatization.

4th Resolution.

In the 2nd Stage the part of lung involved is not entirely airless, but is deeply congested, and when a piece is put in water it will float, but its weight is increased and it is more easily torn. An exudation of lymph is seen on inner surface of vesicles but not enough to close them, its color is of a dark brownish red, its resiliency is last. Physical signs of 2nd Stage. They are present very early in the disease, after the invasion, inspection, &c. Lung only is affected the movement of the healthy lung is normal, but that of the affected side is very much suppressed but if both sides are affected the move-

on both sides is restricted, and the racic movement gives way to abdominal movement. Palpation, Vocal fremitus is markably increased over the affected side or sides of course the more the congestion the more the vocal fremitus. Percussion, Over the portion of the affected lung the percussion sounds are slightly duller, but this is best observed at the close of this stage. Entire dullness is not often observed in this stage. Auscultation, Fine crackling sounds are heard during this stage over the affected part during inspiration, and these sounds resemble those made by rubbing hairs between the fingers, and it is called "crepitant rale." Bristowe says: "Fine crepitation may

is heard during inspiration and sometimes during expiration in this stage." [illegible] says: "Bronchial breathing may be heard in this stage." Morbid Anatomy of 2nd stage. In this stage the lung is red, and a cut surface resembles liver tissue and presents a granular appearance or not a granular appearance. Its size is often more increased owing to the alveoli being filled and even distended with exudation. The affected part in this stage is heavier than normal tissue, as it contains no air and will sink readily in water. Physical signs of 2nd Stage. This stage should be easily recognized. Inspection. The movements of the affected side is less perceptible than in the 1st stage, in fact there may be no movement at all in the

part contains no air. Palpation. The hand applied to the affected part will at once discover an increase in vocal fremitus. Percussion. Dullness has gradually increased over the affected part, anteriorly, posteriorly and laterally, the limit of which can be easily defined. Auscultation. The air vesicles in this stage become completely filled with the exudation characteristic of this disease, and therefore air is entirely excluded from the air cells, hence the crepitant rales of the 1st stage cease to exist, and in its stead we hear well defined tubular breathing or bronchial respiration, which is more marked in this disease than in any other, but if one of the bronchial tubes becomes closed, this form of breathing will stop

ing a spasmodic attack of coughing may relieve patient. Bronchophony may also be heard over the affected lung. Pectoriloquy in some cases is heard. Morbid Anatomy of 3rd Stage. The 2nd stage gradually merges into the 3rd stage and hence there is very little difference between the early part of this stage and the last part of the preceding stage. If a portion of the lung be cut it will present a gray or reddish gray appearance. This is an important stage for it now determines the course of the disease and the probable chances of life. It may terminate first in resolution, which is a favorable course, as the exudation is either absorbed or expectorated and the lung again returns to its

normal condition and the patient recovers. 2nd It may terminate in suppuration or purulent infiltration. The exudation is neither expectorated or absorbed, consequently the walls of the alveoli become distended and finally rupture, 3rd Abscess may be a termination, that is purulent infiltration may develop into an abscess, by the giving away of the septa of the alveoli, these abscesses may be very small or very large and well defined. By the running together of several small ones a large one may be formed, these abscesses may break into a bronchial tube and their contents find exit, or may open into the pleural sack, and cause pyo-pneumothorax, or they may be

or expectorated, or they may cause external fistulous openings. The Gangrene sometimes but very seldom the termination of pneumonia. It is said to occur sometimes when there is great weakness and in deplicaemia. The Gangrenous lung is said to swarm with bacteria. The breath is always fetid. Stinking pneumonia is sometimes the result when in the state of gray hepatization the expectoration is not expectorated or arrested and an interstitial inflammation is set up and continues, and hence a chronic interstitial pneumonia is the result. Physical signs of 3rd stage. They are very much like those of 2nd stage. Percussion may give little resonance over affected side.

Auscultation, There is still bronchial breathing, but not so loud as in 2nd stage. Morbid Anatomy of 4th Stage.

As soon as Resolution commences air enters the cells and if a portion of the lung be put in water it will float, as it is lighter than during hepitazation. It is more airy of a yellow or of a greenish yellow color. Physical signs of "4th" stage.

Inspection, In the stage of congestion as the disease developed the motion of the affected side lessened, but in this stage movement is affected increases as resolution increases. Palpation, In the stage of engorgement vocal fremitus increases with the engorgement but in this stage it diminis is with the resolution. Percussion, Dullness on percussion is

the signs disappear, and it gradually diminishes until resolution is complete.
Auscultation, Broncho-vesicular breathing takes place of bronchial breathing; Bronchophony is no more heard. Subcrepitant rales are heard, which are called "crepitatio redux." When resolution is complete the sonorous, sibilant and mucous rales entirely disappear. All pathological changes of this stage disappear as they came in the stage of engorgement.
Symptoms. A great many cases are apt to develop without any premonitory symptoms. In some cases the [illegible] symptoms are malaise, headache, high temperature, anorexia and chill. The latter symptom is seen in from 75 to 82 % of all cases. The chill may last a

varying length of time from a half hour to two or three hours. The chill is less frequent in old age. There is always a decided rise of temperature accompanied by pain generally over the seat of the affected spot. This pain is intensified by deep breathing or coughing, but does not last very long, and if stabbing in character it means pleuritic complication. Tongue is coated white. Respiration is most decidedly increased, in fact more so than any other acute disease and may vary from 30 to 80 per minute, which is all out of proportion to pulse rate, which may not exceed 100 or 160. This increase respiration and pulse rate is not in proportion to lung affected. Cough is said to be present in a large per cent of all cases.

it is short and hacking in character, more common in children, while in the old it is often not perceptible. Expectoration for the first 48 hours is merely frothy mucus, then it becomes semitransparent, gelatinous and ropy and very hard to get out of the lungs. The vessel containing it may be inverted without spilling the contents. The color changes about the second day when it becomes rusty in appearance or resembles prune juice. This color is caused by presence of blood. This color changes in advanced stages to a creamy looking substance. Small children do not expectorate, but swallow all exudations from lungs. Temperature may rise in a few hours to 103-105 degrees F. After the first day the temperature is subject

to morning remissions and evening exac-
erbations. The difference between evening
and morning temperature not exceeding
generally more than 1½ to 2 degrees. The
highest temperature is generally on the even-
ing of 3rd day, and may reach normal
on the 7th day, just before death the temper-
ature may reach 108 or 109 degrees F. If a
high temperature lasts longer than 9 days
it is an exceeding bad symptom. Ex-
pression of countenance should be noticed
by the physician. An anxious look is char-
acteristic. One or both cheeks become flushed
it is said ½ of all cases have an herpetic
eruption on lips and on end of nose.
Delerium or delirium tremens may be
noticed. Especially is this the case in
alcoholic subjects and also if pneumonia

affects apex of lungs. Urine is of high color, diminished in color quantity and has a high specific gravity.

Differential Diagnosis. It may be mistaken for capillary bronchitis, pleurisy, hypostatic congestion of lungs, incipient phthisis, pulmonary consumption, oedema of lungs &c. In acute capillary bronchitis subcrepitant rale is heard, diffused over whole chest, but in pneumonia it is confined to the affected part only. Temperature in bronchitis is lower than in pneumonia. In pneumonia there is dullness on percussion and bronchial breathing, in bronchitis it is not so. The breathing in pneumonia is very rapid and panting, in bronchitis it is very labored. Acute pleurisy is

ushered in with chilliness, while the temperature rarely rises above 100 degrees F. In pneumonia there is generally a chill which is always followed by considerable fever. In pleurisy breathing is catching. In pneumonia it is panting. There is no crisis in pleurisy. There often is in pneumonia. In pleurisy vocal fremitus is either absent or diminished. In pneumonia it is increased. Hypostatic congestion is designated principally by dyspnoea, and expectoration. Pneumonia may resemble phthisis when it occurs in apex of lungs but it may be distinguished by peculiar symptoms of each. Night sweats and extreme emaciation will indicate phthisis. Irregular temperature which

[illegible] bottle sound indicates phthisis. In oedema of lungs there are subcrepitant râles and incomplete dullness. In pneumonia there is complete dullness on percussion, there is no chill, pain, or rise of temperature in oedema of lungs; in pneumonia there are nearly always the reverse. Oedema is bilateral and generally occurs in the most dependent portion of lungs, while pneumonia is commonly unilateral, and may occur in any portion of lung.

Prognosis.- If fall of temperature and pulse takes place on 6th or 7th day, which is common the prognosis is good, but if temperature is 105 or 106 degrees F. and pulse 120 per minute and last for more than 48 hours, the prognosis is very

and, but may not prove fatal. In private practice the prognosis is decidedly better than in hospitals. In one hospital there were 11 % of pneumonia patients died. In another 24 %, and in another 36 %, but in private practice the mortality is not usually more than 3½ to 7½ %. It is reported that Dr. Bennet had 105 cases of which none died. Pneumonia may terminate by crisis or lysis. In crisis the temperature, pulse and respiration falls suddenly, followed by profuse sweating, pain ceases and the patient naturally falls into a quiet sleep. The cough becomes less, and the sputum becomes more copious, thin and watery. In children and old age mortality is very great. Between the ages

of 11 and 45 years it is decidedly lessened. It is said, "alcoholic patients are apt to die, or at least the tendency is towards death." Flint says, "the progress depends upon the extent of lung involved, the disease with which it may be connected, its complications, the previous constitution of patient etc." If the heart is strong and the right side can perform its function properly, the patient has a better chance for life, as dilatation of right side of heart may cause heart failure.

Treatment. Any course of treatment indiscriminately practiced is not justified, but the treatment must be according to the symptoms, age, and nature of each individual case. Nothing

should be given that would have a tendency to weaken or exhaust the patient's strength. If it is not complicated it will probably terminate in recovery by crisis, but if it is complicated with another disease its course must run in a very different way. It is said many cases will recover without any treatment, and especially may this be true, if the patient is well nursed, and gets nothing to do him harm. The local lesion is not to be treated in the 1st and 2nd stages, but the treatment should be constitutional as the disease is a constitutional one. It is important to keep the patient absolutely at rest, especially, if the signs of heart failure are apparent. This being brought on by exudation of lungs, preventing

the reception of blood from the right ventricle, and hence the blood becomes backed up in that chamber of the heart. The patient in this condition must not even be allowed to talk or to sit up in bed. The room should be well ventilated and the temperature should be kept at about 65 deg. F. In the 1st stage of the disease or for 3-4 days the patient should be made comfortable from the nervous shock of disease by opium, & hypodermic injection of Majendie's solution ~~xx~~ iii is very good, repeated at intervals. The disease can not well be aborted when exudation has taken place. but before this point at the very commencement of the trouble Quinea Sulphas gr XV, and Morphia Sulphas gr 1/4

administered may entirely abort the disease. The quinine has a tendency to check the amorbid movements of the white blood corpuscles and hence exudation of lunge does not take place. Quinine or hydrobromate of quinine may be used for its antipyretic action on the system in pneumonia. It is considered best way of reducing temperature. The application of cold in various ways is also recommended, as cold baths, when the patient is put in water 75 or 80 deg. F. then the temperature lowered by ice or cold water and if patients temperature falls rapidly take him out when his temperature reaches 102 deg. F. but if temperature falls slowly leave him in until it reaches 101 deg. F. Cold sponging and cold

compresses to the chest are recommen-
ded &c. but these modes of reducing
temperature are dangerous; except cold
sponging which may be employed.
Besides the importance of reducing temper-
ature it is also necessary to prevent heart
failure as it is a common form of death
in this disease, the pulse will indicate
the condition of heart. It is said an irreg-
ular, feeble, frequent pulse indicates
the use of stimulants, quinine gr ii-iii
every two hours may be given to sustain
the heart. Alcohol is very good given
cautiously, especially is it recommen-
ded when the patient has always been
used to it. Always give it at first in
small doses, and watch carefully the
result, say give ʒss every two or three hours

and if the pulse becomes regular under its use continue it, but should be given always to suit the case. Carbonate Ammonia gr V-VIII is highly recommended in pneumonia as a stimulant. It will assist expectoration and prevent heart clots, owing to making the fibrine less coagulable. Bicarbonate Potash is also good, Turpentine is a good expectorant in doses of gtt X-XV. I have already said that in 1st and 2nd stages local treatment or counter irritants do harm, but in 4th stage that of resolution it should be employed. A blister may be applied to affected side 6 or 8 inches square, or may apply a flax seed poultice to assist resolution. It should be left until it produces redness

when the patient will be relieved. Lorris
with others recommend cotton batting
or flannel jacket covered with oiled
silk. This has no influence over the
course of pneumonia, but it promotes
diaphoresis, protects the surface from
sudden changes of temperature, and it
is always grateful to the patient. This is
especially beneficial in children.
I saw it applied to a little girl of about
6 years old, last spring who had pneu-
monia following measles, but the dis-
ease had already taken such a firm
hold upon the little one, that no human
skill or medicine could arrest it and
in 24 or 30 hours afterwards she died.

and usually a state of Anemic
supervenes and then also
the amount of albumen and
blood corpuscles is diminished
and this vital fluid is much
vitiated as in other diseases
and the symptoms in Typhoid
[illegible] [illegible] to the [illegible]
system are generally due to
a form of blood poisoning
called Uraemia or Toxaemia
[illegible] [illegible] [illegible] [illegible]
to [illegible] and some [illegible]
[illegible] that [illegible] the blood
[illegible] the [illegible] [illegible]
of [illegible] [illegible]. [illegible] [illegible]
[illegible] elimination [illegible] not [illegible]

many interesting morbid ap-
pearances within the cranium
there is some cerebral conges-
tion with serous effusions
into the ventricles of the
brain but in the respira-
tory system we find many
of lesions [illegible]
Pneumonia has been a com-
plication and we find the tex-
ture of the lungs much
altered. Thickening and dis-
coloration of the mucous mem-
brane lining the bronchial
tubes is common. The lesions
occurring in the digestive
system are of paramount

and general uneasiness, dulness of intellect, nausea, sometimes vomiting, the tongue is furred, epistaxis occurs and there is a disposition to diarrhoea, there is [illegible] pain in the [illegible] and at times a slight acceleration of pulse with increase of temperature in the evening. These premonitory symptoms are generally followed by a decided chill and the patient takes his bed which is usually about the time of the first [illegible] of the disease. The disease being then fully established [illegible] [illegible]

[illegible] is [illegible] terms, [illegible]
[illegible] accumulation
of [illegible] running up different
fluids of the disease [illegible] same
time the pulse was [illegible]
120 per minute and in ex-
ceptional cases it may be
[illegible] during the
whole course of the disease
[illegible] in [illegible] usually
we find the [illegible] of the
pulse diminished with [illegible]
[illegible] in frequency the
thermometer will aid us
[illegible] ascertaining the
variations of temperature of the
body in this disease which

1

I need hardly add, is of the utmost importance to us to know. Sometimes the temperature [illegible] [illegible] [illegible] or still [illegible] [illegible] denotes the near approach of death. During the [illegible] [illegible] or [illegible] [illegible] the temperature gradually rises until it reaches 113 [illegible] when this is [illegible] prognosis grave. [illegible] [illegible] [illegible] [illegible] temperature [illegible] evidence of convalescence, but a sudden fall of temperature may denote hemorrhage from the bowels. About the [illegible] day after the [illegible] tab-

the stone is shot and

is a prominent symptom
which later turns is [illegible]
[illegible] of a [illegible]
kind. Thirst is frequently a
symptom, the tongue becomes
coated with a thin clay
colored coating. Sordes collect
upon the lips and teeth. Diar-
rhea is a diagnostic symptom
the dejections are of an [illegible]
[illegible], hemorrhage from the
bowels may occur. Tympanitis
is usually a prominent sym-
ptom and in many instances
there is tenderness in the right
iliac region.
Causation – usually by [illegible]

Fever is endemic and is
common in every quarter
of the Globe and at times
it prevails as an epidemic;
it most frequently occurs
during the Autumnal season.
Age is predisposing cause
under certain circumstances
it may be propagated by con-
tagion but it most frequently
originates spontaneously; it may
also be propagated by drinking
water contaminated with the
special poison by foul emun-
ations from cess-pools drains
privies &c living on bad
food excessive fatigue &c.

Diagnosis.— The distinctive points of [illegible] from [illegible] are the gradual development, tendency to diarrhoea, bone colored dejections, [illegible], tenderness in the [illegible] region and [illegible], the peculiar [illegible], the absence of [illegible] &c. It is well not to be too much in a hurry in arriving at a positive diagnosis, but if we proceed in accordance with the [illegible] and [illegible] which are distinctive, this disease's differential diagnosis will be comparatively easy, when the

case is not marked it is more
difficult, yet if a sufficient
length of time be allowed for
its development a careful
observer rarely fails in mak-
ing a correct diagnosis.
Prognosis. Though this is a
disease attended with many
dangers, still the prognosis
is favorable, with proper treat-
ment and care of the patient.
The [illegible] symptoms [illegible]
[illegible] as (Ataxia), Sub-
sultus, [illegible], and persistent
delirium, rapid and frequent
[illegible], a temperature of the body
above 105° Fah. very low or very

bowels.

Treatment.— The patient should be placed in a well ventilated room. Chloride of lime or carbolic acid should be used as a disinfectant and the intestinal discharges of the patient should be disposed [illegible] the same as are [illegible] for typhoid fever, in order to mitigate the disease and prevent infection. It is believed [illegible] that this disease may be modified by making the [illegible] treatment of [illegible] [illegible] the faeces until boiled water is [illegible]

may be tried, [illegible] of [illegible]
or small doses of tartar emetic
may be given [illegible] acid
for abdominal pain and also
for amelioration of the intestinal
lesions, fomentations and tur-
pentine stupes should be applied
to the abdomen. When the tongue
cleans or exfoliated in patches
leaving a hard red glazing ap-
pearance, it indicates a change
for the worse in the intestinal
tract and the oil of turpentine
should at once be given in
emulsion with pure arabac
or some other mulsifying agent.
The proper dose for a child is

from 5 to 10 drops and [illegible]
to 20 drops, repeated
every 2 or 3 hours according to
the severity of case. The oil of
turpentine is a most appropriate and efficient remedy in
the treatment of typhoid fever
when extended ulceration or
ulceration exists and is most useful in intestinal hemorrhage
which may occur in the [illegible]
of cases. Too much stress can
not be placed upon the importance of watching the condition
carefully and perceiving such
indications as have been enumerated, especially [illegible] and

ed of turpentine, irritation
is caused as well as pain in-
jections in the tissues - Some
authors recommend alcohol very
highly but it is best not to
resort to its employment in
practice - Some authors assert
that [illegible] fully answers the
[illegible] of food and can be readily
eliminated by the system.
When the digestive system of
the patient is much enfeebled
the judicious employment of
alcohol [illegible] often attended with
good results - When alcohol
is used at all brandy is about
the best form in which to

administer it— If the bladder
becomes distended we must
relieve it by means of the catheter.
If bedsores occur, remove the
position of the patient and
apply to the parts alcohol or oil
of turpentine with oil of
copaiba— If moderate exhaustion
stimulus must be given internally
and poultices must be applied
to the abdomen, As soon as the
patient becomes convalescent
food should be given in small
quantities, but often the appetite
of the patient becomes voracious
and great care is necessary lest
the patient take undue quantities

no irritation little ... The patient
should at first be given such
articles as are most nutritious
and of easy digestion, such as
Wine Whey, Milk, Eggs, Beef tea
cocoa etc., and excess of irritating
solid articles of food must be
scrupulously avoided as the
patient grows stronger more
solid food may be allowed =
Violent exercise after con-
valescence must be avoided.
If complications occur
during typhoid fever we treat
them accordingly, but at all
times and in all stages of
the disease will yield

carried conviction to others than their originators. Typhoid Fever, as we know it, is not distinctly recognized [illegible] of these [illegible] and it is not until the seventeenth century that the clinical conditions [illegible] followed the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] Louis and Chomel in France, during the first thirty years of this century, did more by their careful observations at the bedside and their patient labors in the autopsy room to elucidate the symptoms and course of the disease, to connect these with the pathological lesions, and to place

[illegible] in the [illegible] light by which we [illegible] this very important disease to day than any or all of their predecessors. Even after the publication of their observations a good deal of confusion prevailed for another ten years between typhoid and typhus fevers, the one being more common in France, the other in England, the symptoms being by no means very dissimilar in exceptional cases or at least sufficiently [illegible] to throw doubt upon the recently promulgated pathology. This doubt it was the privilege of American [illegible] of Louis to be instrumental in dispelling.

[illegible] ins which derange the digestion [illegible] ise to these special results.

Predisposing Causes. — Age. This is the most important of the predisposing [illegible] es. It is [illegible] of youth, the great majority of cases [illegible]

[illegible]

they are [illegible] equally liable.

Typhoid fever is no respecter of locality. It prevails alike in cities, in towns, in villages and in solitary [illegible]; among the poor and the well to do; on high and on low ground; on a sandy or clayey soil. It is, perhaps, [illegible] diseases, the most

Exciting causes. As far back as our knowledge of the disease carries [illegible] it presents the same picture [illegible] we see it to-day. [illegible] true.

It is a specific disease; pathology and observation afford natural ground for the belief that it has a specific poison. The latest and most serious attempts to associate certain microbes with the disease are those of Klebs and Eberth. These are both bacilli.

Eberth's bacillus is short, thick with slightly rounded extremities; several being at times joined together.

These organisms have not been found in other affections, even in such as are accompanied by severe intestinal ulcerations; they are found constantly

a convalescent.

In some cases, especially of relapse, the floor of the ulcer becomes the seat of a secondary ulceration; or occasionally an ulcer heals in one part and extends in another; and again there may be ulcers healing in one part of the intestine, with fresh ulcers and patches in a state of hyperplasia elsewhere. The secondary ulceration is said to be more apt to cause profuse haemorrhage and perforation than the primary sloughing of the glands.

The tubercular ulcer of the intestine presents a strong contrast to the typhoid ulcer and it is necessary to distinguish the two is to distinguish between the clinical symptoms of acute tuberculosis and typhoid fever

the edges and base of the tuberculous ulcer are thickened and indurated, and the nodules of new growth, tending to become caseous, are seen scattered in its floor. It rarely if ever, heals. The thickening of the tissues at its base makes perforation a very exceptional occurrence.

Treatment - The treatment properly includes the whole management of the patient. In those not uncommon cases where the evening temperature does not rise above 102°F., nor the pulse advance beyond 110, and there are no complications, the actual treatment may not go beyond rest in bed and a liquid diet.

turpentine given in emulsion every two or three hours is useful. Hemorrhage from the bowel is generally announced by a sudden fall in temperature without other assignable cause. If not profuse and not repeated, it may not require any treatment but quietude. If further treatment is needed, the conventional agents are the vegetable or mineral astringents, and I prefer the hypodermic use of ergot in [illegible] doses, the use of cold in the form of ice, is [illegible]. Perforation, which occurs in about 11 per cent of the fatal cases, is generally announced by pain and collapse, and except in those rare instances where two portions of the

bowel are raised together and better
formation takes place between them.
opium in large and easy doses.
often the only hope.
Cold compress at each extremity by
means of sponge baths, the wet pack
sprinkling the exposed surface of
the body.
Sponge baths will moderate
temperature of 100° are grateful,
refreshing, tranquillizing, keep
up the action of the skin, can be
given without fatigue to the pat
ient, and if frequently repeated
will exert a certain positive ef-
fect upon the temperature and
nervous system.

Quinine if given in large doses in the evening, the fall of temperature coinciding with the usual morning remission will be greater, if given in the morning, the evening maximum will be modified.
With antipyrine supplemented by cold sponging or the wet pack if need be, I think the temperature in nearly all uncomplicated cases of typhoid fever can be kept within the line of safety. Individuals develop idiosyncrasies toward antipyrine as they do toward other drugs, antipyrine is a safe, rapid, efficient antipyretic.
Convalescence from typhoid fever is always slow and may be very prolonged.

this may be a matter of weeks, and
may be a matter of many months.
During this period a careful super-
vision of the patient is desirable,
even as to food, clothing, exercise,
occupation, rest. Reflecting on
these points, instead of being surprised
at the slowness of convalescence one is led
to wonder at the recreative force which,
builds up afresh in a short period a large
part of the whole body, and in the
same time, one understands why
it is that the convalescent after
passing safely through an attack
of typhoid fever feels rejuvenated
and as if he were born anew.

Acute Pneumonia
By
E. H. [illegible]

Acute Pneumonia

The first stage is that of congestion or engorgement. The inflamed portion of the lung is heavier than in its healthy state and the cut surface presents a dark red appearance and a bloody liquid flows in abundance which may be a little frothy.

The microscopical examination shows the pulmonary capillaries distended with blood and the air cells filled with a serous liquid containing red corpuscles in abundance, a few white corpuscles, and large granular cells which are epithelial cells washed off by the watery transudation from the blood. In this stage the affected portion of the lung does not sink in water

In the second stage usually called the stage of red hepatization the air cells and bronchioles become filled with a solid exudation and cease to contain air. The solidified lung is of a brownish red color, non crepitant and presents an appearance not unlike that of the liver. Upon its cut or torn surface it presents a granular appearance due to the projections of the little solid masses which distend the air cells and bronchioles. If then examined soon after death, the cut surface is dry; later a viscid turbid reddish fluid may be made to flow. The lung readily breaks down under the pressure of the fingers more readily than in its healthy state.

Stage of gray hepatization.

The granular appearance is then less distinct and the surface moist.

The red blood corpuscles are less in number but the pus cells are abundant and contain molecules of fat.

The lung may present the appearance of gray hepatization after death within a few days from the onset of the disease or the aspect may be that of red hepatization after the disease has lasted two weeks or more.

Most frequently the lung is found in a mottled condition, [illegible] of mixed gray and red.

It is usually considered that gray hepatization is a later stage of red-

Hepatization when the inflamitory products are in process of absorption. Absorption may take place with great rapidity.

In this third stage or stage of absorption the red blood corpuscles lose their colouring matter, the pus cells undergo fatty degeneration, the fibrin becomes granular, and [illegible] of serum takes place, so that a kind of granulo fatty emulsion is formed suitable for absorption by the lymphatics and blood vessels.

In favorable cases, after the removal of the exudation, the air cells are found to have sustained no damage. The pulmonary structure [illegible]

Instead - while the exudation remains, and its functional capacity is fully restored after the exudation disappears. Ether after death the color of the inflamed lung is yellow or grayish yellow the granular appearance absent; the tissue soft and exuding a creamy fluid, the lung is said to be in the condition of purulent infiltration. The exudation which also the air cells consists almost wholly of pus, and pus cells are present - abundantly in the interlobular tissue - but the lung tissue is not broken down.

Gangrene of the lung sometimes occurs, but is extremely rare.

Pleuritis with fibrinous exudation is developed in the portion of the pleura covering the affected lobe or lobes of the lung. This concurrent pleuritis is never absent except in those rare cases in which the pneumonitis has not extended to the surface of the lung. To exceptional cases with liquid effussions may be applied the term pleuro pneumonia although in a strict sense nearly every case of pneumonia is pleuro pneumonia.

More or less bronchitis, affecting the bronchial tubes within the affected lobe or lobes, usually exists with pneumonitis. Bronchitis affecting the bronchial tubes of both lungs, sometimes

But rarely present with pneumonitis. When these two affections are combined it is accidental, Bronchitis as the primary affection [illegible] lead to the development of pneumonitis. Pneumonitis attacks, in the great majority of cases, the lower lobes, and the lower one of the right, oftener than of the left lung

The disease very rarely, if ever attacks two lobes simultaneously; but it invades, not infrequently in succession a second and even a third lobe.

The lobes of one lung may be successively invaded, or a single lobe on both sides, or, an entire lung being first affected, a lobe of the other lung may be attacked.

In the two latter cases the pneumonitis is said to be double. The whole of the lobe invaded is not at once affected. The inflamation begins at a certain point, and extends from lobules to lobules until the entire lobe is involved. The diffusion of the inflamation over the lobe takes place with more or less rapidity, sometimes in a few hours, but in some cases it occupies several days. The progress of the solidification from exudation may be determined very accurately from day to day, or hour to hour by means of physical signs. Solidification almost always occurs, and where the inflamation

is not secondary to other pulmonary diseases, usually extends over the lobe or lobes invaded.

The first stage embraces the period in which the affected lobe is in the state of active congestion or engorgement.

The disease is considered as passing into the second stage when the affected lobe, or a greater part of it, has become solidified by the inflammatory exudation.

This is the stage of solidification or hepatization.

If the disease pursue a favorable course, the third stage begins when it is evident that absorption

of the exuded matter is going on, and convalescence takes place during this period.

This is the period of resolution.

If the disease pursue an unfavorable course, the 2nd stage is one of suppuration or purulent infiltration, and this stage is the purulent or suppurative stage. If this stage occur, the disease generally ends fatally.

The duration of each stage varies very much in different cases.

The stage of engorgement may last but a few hours.

Not unfrequently this stage does not extend beyond twenty four hours

But sometimes occupies two three or four days and in severe cases a longer period.

The stage of resolution varies in different cases as regards the rapidity or slowness with which the solidifying deposit is removed.

Resolution is rarely completed in less than three or four days and generally eight or ten days are required.

In some cases two or three weeks elapse before the alveolli are restored to their normal condition, and sometimes a longer period is required. After this case passes into the purulent stage, death usually

Takes place within a few days: but if it ends in recovery, many days and even weeks elapse before the normal condition is restored.

In the majority of cases, acute pneumonitis commences with a chill frequently accompanied by vomiting. The thermometer shows increased temperature, although coldness exists as a subjective symptom. The invasion is usually abrupt, and the attack is apt to come on at night. A dull pain is apt to follow the chill, but is not always present.

The pain is usually referred to a circumscribed space on the affected

of the affected side
Cough is usually present but not always. The cough is generally accompanied by expectoration.
The expectorated matter is at first scanty, transparent, and vicid.
It becomes semitransparent adhesive and has a reddish tint like iron rust.
This is caused by a small quantity of blood becoming mixed with the matter in its pasage from the small to the large bronchial tubes.
When the blood is abundant, and when the blood is of a dark color it is called the prune juice expectoration.
Fever exists from the out set to gather with pain in head.

loss of appetite, thirst prostration and heat of skin.

The pulse is more or less full and rapid and varies in frequency in different cases.

During the stage of solidification the symptoms change.

Pain is less severe. Cough and expectoration continue but cough is less hard and painful.

The expectorated matter loses its rusty appearance and becomes opaque, less adhesive, and more abundant.

During the stage of resolution the fever diminishes and ceases.

Cough and expectoration become

less and less the respiration re-
sumes their normal frequency
the appetite returns and the
strength is increased, and
convalescence is declared.
No period of life is exempt from
this disease.
The disease occurs most frequently between ten and fifty years.
The attack is excited by some
unusual exposure such as sleeping
in the open air.
Persons of intemperate habits
are more apt to contract this
disease. Pneumonia occurs as a
complication of other tho
pulmonary diseases

It is met with in typhus and typhoid fever, measles and dysentery.

The disease is more apt to occur during the winter months.

If a patient be seized with a chill followed by fever together with a pleuritic stitch referred to a circumscribed space at or near nipple and the characteristic rusty expectoration.

Slight or moderate dullness on percussion and crepitant rales.

Care must be taken not to confound this rale ~~for~~ with the subcrepitant rale.

When solidification has extended

sufficiently over the affected lobe
to furnish the signs of that condition.
The diagnosis is made clear by
the following
Bronchial respiration broncho
phony, and whispering bronchophony
denotes the condition of solidification.
The second stage may be determined
by the extention of these signs.
Dull sound on percussion nearly
or quite flat.
Dull sound or flat sound extends over
a space corresponding to that occu
pied by the solidified lobe.
The crepitant rales continue
more or less diminished during
the second stage or may disappear

after the affected side has become solidified:
The moist-bronchial rales may be heard in this stage.
If the disease pass into the stage of suppuration the dullness or flatness on percussion continues, and moist-bronchial rales, due to pus in air tubes, are prominent.
If abcess of lung takes place and pus be discharged in to the bronchial tubes cavernous respiration may be well marked.
If the disease be primary, and uncomplicated, a favorable termination may be expected in a patient not enfeebled by old age

or other causes.
The complications which are apt to render it fatal are pericarditis, intermittent fever, and delirium tremens.
The danger is greater if the disease invade more than one lobe.
Heart clot may form in pneumonia.
The invasion of a second lobe in a feeble patient may be accompanied by prostration, amounting to collapse.
Frequency and feebleness of the pulse: great frequency and labored of respiration: lividity of face: purulent or muco-purulent expectoration: bloody, dark colored sputa, known as the prune juice expectoration

Violent delirium with prostration and subsultus tendinum constituting the typhoid state

Death generally takes place by asthenia in combination with apnoea, the former predominating.

The early administration of a vigorous purgative as Epsom salts, or citrate of magnesia.

Tartar emetic in the dose of one eighth to one fourth of a grain for adults; every two or three hours may be continued during the height of the febrile stage.

After the height of the attack, small doses of ipecacuanha may be substituted for the antimonials or gros potassium citrate every two hours. Veratrum viride is given in small doses but must be withdrawn when the pulse has been sufficiently reduced.

Tincture of aconite with hyoscyamus

Ascetates is also used by some.
The lung should be placed at rest as nearly as possible by bandages around the body. first covering patient with cotton
adhesive plaster may answer the same purpose.
Support may be required from the first by beef tea wines &c given in milk.
Twenty grains of quinine given early may abort the attack of pneumonia Some advise the continuous inhalation of cold air brought directly from window or door. Give digitallis when kidneys are not [illegible] freely

E. A. Slayman

The Physician & Practice of Medicine

In undertaking to describe the Physician, I wish to describe what I consider is the Physician indeed, & not the blacklegs or quacks - for that is simply art of medicine. or that he happens to prescribe to every one who happens along with a pain or that he has gotten his M.D. or that he stood best man in his class, & could recite better & talk more medicine (using the biggest words) than any man in the country. Does this constitute the true physician? I think not - I know that it is [illegible] & is right that we should take long years of hard study, before we pretend to practice medicine. After doing this we are far from being really good Physicians & we are

[illegible] than you [illegible] to [illegible] [illegible] [illegible]
near the sleeping stone when we [illegible]
~~[illegible]~~ may study this great life work
before us. There is [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] man should
think well before he undertakes to
[illegible] [illegible] [illegible] self.
The word Physician means the art of
healing or prescribe [illegible] [illegible] [illegible]
[illegible] [illegible] skilled in the [illegible] [illegible]
[illegible] [illegible] [illegible] that heals [illegible]
diseases, or a physician of the [illegible]
[illegible] [illegible] [illegible] [illegible] skilled in [illegible]
we have to do [illegible] in this, then we
we must [illegible] years of work [illegible]
[illegible] [illegible] [illegible] prepare [illegible] [illegible]
this work, before we undertake [illegible] [illegible]

We should prepare our selves in many ways besides that of knowing how to prescribe medicine.

Preparing our selves for this work.

I do not think that we should spend all our time in simply reading over books. We should not only try to take in this knowledge by hearing the lectures & reading the subject but by spending one year at least in an Hospital & watching every case that may come under our eyes. I saw some M.Ds last summer from a Neighbouring school who said they knew nothing about the practice of medicine & would not know how to act if they we called in to see a case. Theory is certainly

to have ... important but theory
without practice does not fit a
man for the practice of medicine
I contend that all medical schools
should have clinics.
After spending 2 or 3 years of hard work
& we are sent out into the world as
"M.D.s" then truly begins the "big" work
Beginning life as a Doctor
The first thing a young doc
needs of them ... up to ... of a
list of instruments (many more than
he needs) He will also buy a ... case
pocket or buggy case to carry his instru-
ments in ... the ... ,
to be well filled with a great many
things he may never use)

Thus prepared he starts out to his field of work, looking with longing eyes day in & day out for some case, on which to use his skill. As one of my Profs. often says "You young bucks" will start out with & use great quantities of medicine but the older you get the less you will use, & you will soon find it without injury to you or your pockets or your patients. I know of an old Dr who has been very successful in his life in the practice of medicine & he never carries more than 3 or 4 bottles of medicine with him, having practiced now for 35 years.
Some give too much & some not enough, mix the two & we get about the right mean. Bent to vigorous use...

[illegible] the [illegible]
[illegible], the practice of medicine.
We have to contend with the old Drs who
will often make fun of us, laughing
at our many mistakes, not once
thinking or seeming to remember that they
too were once young in the cause.
We must contend too with the people
who will often tell us we are too [illegible]
& know nothing about our business.
You may be called in to see a case
of midwifery & you find the walls of
the room lined with knowing old
women who will wish to direct the
job for you & tell you Dr so & so did not
do this or that. You can pay attention to
what some of them [illegible] to a [illegible]

[illegible] for they often give you good points
some times that may help you things
you may never have thought of before
but all this harm the young man
when he thinks now he has an M.D.
wise old women must give me
advice about a thing that I know
more about than they do.
I was sent once to attend a case of Midwifery
[illegible] my preceptor [illegible] not telling me of the old
women, when I got to the house I found
half dozen of them [illegible] the [illegible]
[illegible] to such an extent that not even
a chair was left for me to sit on
you may imagine my feelings when
I found that they were all strangers
to me. I am certain I was much more

frightened than the woman [illegible] was
about to have the baby, each [illegible]
wanted to give advice to me. I [illegible]
[illegible] a great deal but all [illegible]
was otherwise and things would not go [illegible] it
[illegible] I told the husband that all [illegible]
leave the room except the [illegible]
[illegible] I should [illegible] seek,
[illegible] soon left and then [illegible] further [illegible]
[illegible] wife that as I had been [illegible]
called to the case I [illegible]
master of ceremonies, the [illegible]
[illegible] not, the [illegible]
had no more [illegible]
I received another call [illegible] at the
next house. [illegible] killing my
temper got the best [illegible]

[illegible]
[illegible]
[illegible]cation of the [illegible]
I learn afterwards that they said [illegible]
check which [illegible] the [illegible]
complying they could [illegible] paid [illegible]
"A certain [illegible] professional tact
our [illegible] sagacity is as necessary to
the Physician as the mariner['s] compass
is to the navigator." So we should start
out by requiring strict [illegible]
and keeping our debts paid up by paying
cash for everything we [illegible]
invoices bills when due [illegible] require their
to be paid by saying [illegible]
that you wish to settle your own
accounts and must require others

together with you. It seems to be [illegible]
with some people not to pay or to put
off paying Drs bills & those kind of
people you have to be strict with.

<u>Attend to all Calls.</u>

How often Drs are inclined
to calls when they know they cant
get any thing for it, & I never say
I cant blame them for it, for a Drs
life is a hard one & it is harder still
for him to have to be pulled out of bed
on a cold night & go to see someone
[illegible] when he gets nothing for it & it
[illegible] he has been doing
[illegible] still [illegible]
[illegible]
the [illegible] of relieving the suffering

The Dr should always be cheerful

How much better is it for the patient if he sees a Dr who will enter his sick room with a bright cheerful face. It costs the Dr nothing to be polite & cheerful & he is apt to [do] a great deal more good. When a patient has this kind [of] a Dr to visit him, he is happy always to see him, & it does him good to talk to & with him.

We should study this branch of medicine as much as we do any other.

It is certainly better to be able to enter the sick room with easy manner & a cheerful face, than not to be able to do so. The appearance

language ... of ...
course of some words are pleasing;
others ... are rude & harsh & repulsive
to the sick—
Familiarity with many little details
... the sick room including ...
art of ... & ... of ...
& with minor operations, you are
... incidentally called on to
... create ... favorable
mission. Indeed it is to a great extent
by those that the watch ...
the habitues of the sick room judge
you. The art of keeping hope & confidence
alive in the bosom of the ...
... friends is a great one
A cheering word ... does ... good

Sometimes it is a necessity.

Have no confidants.

As the family physician we know many secrets & we should be very careful to keep them. So many Drs tell their wives, that such & such patient came to them. The young man will come to you so will the young woman for advice & consultation.

Never ask private questions in [illegible] not in the patients confidence, unless they are clearly entitled to hear them. request all such to leave the room, especially if they are of the opposite sex, before asking such question.

Be doubly cautious in this respect when your patient is a female & you

questions regarding marriage, menstruation
pregnancy, lactation, uterine affections or
or other delicate subject, that her secret
may not be exposed, or her modesty
encroached upon. Never let any one draw
from you professional secrets, or make
details of your cases, [illegible] persons
[illegible] to hear told from house to house
what they have said in their delirium.
Nothing is more mortifying or hurtful
to the feelings of sensitive patients than
to hear that the details of their cases are
being whispered about or coming from
the physician himself.
Seal your lips as you go from house to
house & do not mention the private
affairs of any body. Do not talk of

those who have had venereal disease or
or that abortions etc have taken place
or that such & such person takes
[illegible] liquor or that [illegible]
a baby [illegible] after marriage or [illegible]
[illegible] has one without being married
[illegible] at all or that [illegible] is addicted to [illegible]
immoralities, or that [illegible]
[illegible] habits [illegible] patients wish [illegible]
[illegible]
selves.

Sunday work.

Do as little work on Sunday
as you can. Your health will require you
to rest one day out of the seven every
I know that often you are obliged
[illegible] on Sunday too, for a great many

people (especially in the country) will
send for you on Sunday, when they
might have done so on a week day
[illegible] because they have come
to their places [illegible] [illegible] [illegible]
should only be done as little [illegible]
[illegible] day as you can & you are very
apt to find time to attend Church.
It is not the [illegible] of the people at
the gathering [illegible] [illegible] to put off
the work they have to do on weekdays
& do it on Sunday. I believe a "Sunday
well spent brings a week of content"
Man should certainly be allowed [illegible] in the
week [illegible] from work, [illegible] he should
take the other day of the [illegible]
I think it a blessing that we have [illegible]
)

Examinations of females -

The most delicate of all the things a Dr has to do, is also the most dangerous to the physician himself, not only in the contracting disease, but in a moral sense. The best way is never to examine a woman with out a 3rd party is present, no matter how good a man may be, he may be easily tempted & give way to the natural passions of man, & all forlorn in the eyes of the people & of himself.
The Dr has far more temptations than people may think they have, & are harder to stand. Many a woman who should be pure & is to the eyes of the world, is a sore trial to the physician [illegible]

attend here. The dr[illegible] him all I should

[illegible] more careful for woman as the

weaker sex, & therefore he should strive

to keep from all temptations.

We often hear of [illegible] & preachers

who fall from some just such temp-

tations, & we should not be too quick

in condemning them, [illegible]

[illegible] to go through, & [illegible]

for the young man than the older

Advice & Medicine

I dont wish you to think, that

I think medicine is not as good as

advice [illegible] I also think I [illegible] too much

[illegible] There is no doubt in my

[illegible] [illegible] cure [illegible]

[illegible]

then often a little medicine & a great
deal of good advice, not to drive
until they are more good than to kill
ones stomach with [illegible] –
I know a Physician who gave
one or two medicines for love, many
& I asked him why he did it, he said
that most of his cases needed
more than medicine he wished
to give them something that would
do them [illegible] but would satisfy their
desire for medicine.
I believe that drinking, & the drinking
habit is started often by the Dr & we
should be careful, very careful how
we use these medicines, though they
are very important.

their place. I remember hearing of a
town in which they could keep no
barrooms & the druggist had the right
to sell whiskey by the bottle, the Dr
prescribing it, so when a man wished
to get drunk he would go to the Dr &
get a prescription & in this way get
his whiskey. Is this the way a [illegible]
[illegible] is this the practice of medicine?
is this the true physician? I think not,
such I consider are a disgrace to the profession.
"The first & greatest aim of the good & great
physician is to restore his patients to health in
the shortest time with the minimum amount
of medicine." There are plenty of people who
will expect you to give them something,
& you can give it such a placebo [illegible]

will do just as well & as much good as stronger medicines which are apt to harm the digestion.

<u>Treatment</u> of <u>other</u> Drs in the <u>profession</u>.

Of all things in this world I think it the most detestable to see Drs [illegible] fussing; why should they! because one happens to get a little jealous of the other & says some thing [illegible] [illegible] going the rounds, it [illegible] [illegible] the other [illegible] & then he gets [illegible] & perhaps then [illegible] &c. It is much better in the first place not to hold of any one, in the second don't pay any attention to what is said about you, if you do, go to the Dr who said it & settle it with him, <u>alone</u>.

tell about it - Be careful when calli[ng]
to see a case, & find out whether you
have a right to take the case or not.
The best way is the right way, [illegible]
save a vast deal of trouble, [illegible] be
careful to keep on the right side -
I am sorry that I have not more time &
space to write more on my subject.
I have not & I hope my critics will not
be hard on me [illegible] in using this subject
[illegible] write my idea of the Physician
or the Practice of Medicine [illegible]
quote [illegible] a few -

B. [illegible] C. Smith [illegible]
University, Hospital
Dec 28th 188[illegible].

B. M. Smith Jr
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A

Thesis on

Pleuritis

Respectfully submitted to the examination of the

Provost Regent and Faculty of Physics of the University of Maryland

To the degree of

Doctor of Medicine

By George W. Truitt

of Maryland

February the 14th 1887

245.

Pleuritis

The respiratory system like all other parts and portions of the body may become inflammed by various causes which we will state further on in this writing. Inflammatory diseases of the respiratory system are [illegible] [illegible] [illegible] important structures comprised in the organs of the respiratory apparatus [illegible] [illegible] [illegible] [illegible] lining the air passages the serous membrane which invest the lungs and the pulmonary parenchyma. Inflammation affecting the structures just named gives rise to pleuritis or pleurisy

pneumonitis or pneumonia and
[illegible] ed namely pleuritis which we now
purpose to consider, may exist as
an acute and subacute or chronic
affection. [illegible]
[illegible] of [illegible]
[illegible] and [illegible]
consider briefly [illegible] varieties
of the [illegible]
properly [illegible]
tion. [illegible]
[illegible] these results of pleuritis the
[illegible]

hydrothorax. The anatomical structure of the pleura. The serous membrane [illegible] are essentially [illegible] serous [illegible]
It is composed of white fibrous connective tissue containing a network of elastic fibres.
It is divided to two layers [illegible] visceral and parietal. The free surfaces of these two layers are [illegible] and covered with a single layer of polygonal nucleated cells called endothelial cells. The surfaces are moistened with a slight serous transudation.

Anatomical character or pathological condition during life

brames and may be regarded as

a type of all acute serous in
flammation. If pleurites and
other serous inflammation could
be seen during life they would
doubtless be reddened from hyper
=aemia of the vessels within and
beneath the pleural membrane.
Redness here as in other situa
=tions may diminish and disappear
after death. [illegible]
after the commencement of the
inflammation for a brief period
the membranes are abnormally
dry from suppression of the
transudation which moisten it
in health, no doubt this is the
true condition of things. The

lumen loses its distinct appear-
and soon becomes more or less
swollen and opaque from the
infiltration into its substance.
Small extravasation of blood or
ecchymosis are not infrequent
[illegible] tissue.
An effusion of inflammatory
[illegible] At first it
[illegible]

film up to half an inch and
some times thicker. The fluid
[illegible]
of the inflammatory process. It
[illegible]
at first [illegible]
and in some cases never passes
beyond this moderate limit in
[illegible]
to several
first is [illegible]
greenish and [illegible]
flakes [illegible]
In many [illegible]

is character throughout, but in
a deposit of a small amount of
milky like sediment on standing.
Part of the Epithelial
normally cover the
and a part less severely
various shapes with a vesicular

cells in the pleura itself
and also proliferation. The hyperplas-
=ies of the tissue are derived
and form the connective tissue,
parts also of the proliferated endo-
=thelium. A new formation of
capillaries in the under parts of
the layers of fibrin which
covered the pleura. This usually
takes place from four to six
days after the inflammation
begins. More or less fibrin is also
present in the form of granulation
tissue.
The termination of acute pleuritis.
Pleuritis terminates either in death,
in resolution, in chronic pleuritis

or in empyema. If resolution
is to take place, the serum is absorbed
the fibrin, pus-cells and red blood
corpuscles disintegrate, and are like-
wise absorbed and the granulation
tissue is changed into fibrous
connective tissue. The connective
tissue develops both in the form of
diffuse fibrous thickening of the
pleura and thread like or band like
adhesions between the two serous sur-
faces. The long adhesions are
produced by vessels of the
granulation tissue into the fibrin
and fluid which during the inflam-
mation fills the pleural cavity
from each side.

in mind that after the most favorable termination of pleuritis the pleura does not return to its normal state but is left with a new growth of connective tissue which binds the pleural surfaces together over a greater or less extent. These adhesions are at first weak and may be broken by active exercise or by coughing. If after the lapse of three or four weeks the inflammation continue to increase or remain stationary or diminish very slowly the disease has passed into a chronic stage.

Diagnosis

There is seldom any percepible alteration in the exterior of the

chest. When effusion takes place to a great extent the signs are similar to those of chronic diseases. The resonance of the chest is diminished and the vibrations of the voice cannot be distinctly felt by the hand. There is more or less dullness of sound on percussion, the dullness diminishing or disappearing in changes of position. On auscultation, the respiration is feeble, distant or inaudible, but a crepitant rattle replaces it. Egophony is usually present, when the effusion is in moderate quantity and is best heard over a portion of the thoracic cavities, circumscribed by a band

condition of things is experienced fo
[illegible] two or three days before the d[illegible]
[illegible] acute inflammation. [illegible]
[illegible]asion may be sudden and witho
[illegible]emonition. It is so [illegible]
[illegible] by a well-pronounced chill acc
[illegible]anied with rigors. Not infre[illegible]
we get a history of chilly sensations
and slight shiverings. [illegible]
affected side attends the onset of
[illegible] acute inflammation in a la[illegible]
[illegible]ajority of cases. The pain is usua[illegible]
[illegible]. It is a sharp, cutting or [illegible]
[illegible]
[illegible] great pain, breat[illegible]
[illegible]
of the body are extremely pamf[illegible]

The pulse is [illegible] [illegible] 110 per
minute. The temperature [illegible]
is raised. The thermometer [illegible]
shows more or less [illegible]
[illegible] 102°. [illegible]
instances the fever is [illegible]
temperature rising to 104° or [illegible]
with a corresponding intensity of the
other constitutional symptoms. [illegible]
most of these instances the [illegible]
is of a suppurative [illegible]
Cough is usually [illegible]
[illegible]. The breathing is more or
less frequent. The frequency of the breath-
ing is no doubt due to the compression
of the lung by the liquid. Expectoration

is slight or wanting, when present consists of simple mucous.

Causation

[illegible] is attributed [illegible] cases to the action of [illegible] long been considered as a [illegible] source of a great [illegible] an attack to some [illegible] -less, when it had [illegible] or at most acted only as [illegible] Still it is probable that [illegible] some time's originate [illegible] [illegible] -matically by contusions, [illegible] companied by or with [illegible]

and penetrating wounds ... of parts adjacent to the pleura ... and important role in the ... of pleuritis. ... local affections which ... secondary pleuritis are tuberculosis ... tetis, pulmonary tuberculosis ... abscesses. Pleuritis may be ... to other diseases ... cancer, sarcoma, and ... cases which seem to ... careful search ... made for some hidden ...

Prognosis

In cases of acute primary ... =pathic simple pleuritis, if ... complicated ... constitution ...

patient is not so greatly enfeebled the
prognosis is almost always favorable
and would be very far indeed
from fatal if it does not [illegible]
of any therapeutical interference. In
consequence of the large amount of effu-
sion occurring very rapidly may become
prove fatal, death taking place by
apnoea, pressure, [illegible] by [illegible]
of the lung on the unaffected side, in
addition to the function on the affected
side from compression by liquid.
Acute pericarditis some times develops
itself simultaneously with, or during
the progress of pleuritis, and these asso-
ciated diseases are liable to prove fatal.
The intrinsic tendency of the disease

is to recovery, a fatal termination being due very rarely to the disease itself but affections with which it may be associated

Treatment

In considering the treatment of pleurisy it would be best to look upon the disease as existing in three different successive stages. The first stage being from the attack to the time when an appreciable quantity of liquid effusion takes place, the second stage will extend from the time when the liquid begins sensibly to diminish and the third stage will comprise the period occupied in absorption of the liquid. When the pain is stabbing or lancinating

in character in the beginning of the disease, anodynes should be given in sufficient quantity to allay pain. Opium without a doubt is the best anodyne to give. In many of the milder cases of dry pleuritis the application of mustard or other counter irritants and the binding of the chest with a broad flannel roller of the affected side with strapping to restrain its movements. Clinical experience and sound pathological views have led to the knowledge of the great value of opium in the treatment of inflammatory affections wherever situated. It is valuable not only as a palliative but as a curative

remedy. Its palliative efficacy is of course indisputable, and we can all to some extent understand its modus operandi. By relieving pain, it diminishes the determination of the blood to the inflammed parts. Opium exerts also a curative influence by preventing or diminishing the constitutional disturbance which inflammations are apt to occasion. It places the system in a condition to tolerate better the local affection. Bloodletting in cases of acute pleuritis has by some authors been considered and treated, but to a certain extent has fallen into disuse. Statistics show better results where bloodletting has not been practised.

although there are conditions and circumstances in some cases when bloodletting may undoubtedly do a considerable amount of good, second stage, when the patient begins to suffer from pleural effusion and a [illegible] of breath, the arrest of the effusion and the removal of the fluid which has already accumulated become the chief indication for treatment. For these purposes, diuretics, diaphoretics and purgatives have each been strongly recommended, and among the drugs mercury, antimony, digitalis and iodide of potassium. We believe that all such agents are practically useless for the purpose here indicated, and that

If we are to trust to drugs at all they should be those which be tending to improve the general health of the patient and indirectly to promote healthy action at the seat of the disease. Tonics, especially iron and quinine. Counter-irritants, and especially small blisters some times seem to aid absorption. It becomes necessary in a certain number of cases to draw off the pleural effusion by means of an aspirator. When the effusion has remained for a month without diminishing this should be sufficient to demand of his an operation of paracentesis. The operation of paracentesis should be made a means of last resort to get

rid of the pleural effusion. When the pleural effusion demands of us the operation of paracentesis we may make use of the aspirator which is probably the best instrument to use. The operation of paracentesis if the air be excluded is a perfectly harmless operation so long as the discharge remains sweet. Every precaution should be used to exclude the air but when the discharge becomes fetid little is to be gained by further exclusion of the air. It then becomes important to wash out the cavity daily either with pure water or water medicated with quinine or corbolic acid. In every case and under all circumstances when we do the operation of paracentesis we must observe

every antiseptic precaution which is known to medical profession. In certain number of cases where we do the operation of paracentesis it will not be necessary to draw of all the fluid, nature finding itself assisted will go on to complete the process of absorption, however there may be cases in which nature may not proceed to complete the process of absorption in these cases it may become necessary to operate a second time. It may become necessary no doubt in a few cases to operate early when the accumulation of fluid is sufficient to involve danger or distressing dyspnoea. The removal of the liquid should be drawn of slowly so that the collapse may not be to sudden or

great. In connection with our medical and surgical treatment the strict laws of hygiene and alimentation should receive due consideration. During the active stage of this disease the diet should be light and simple such as soup, broth free from salt and greasy substances and should be given at intervals of three or four hours. After the active stage of the disease the diet may be made to consist of something more substantial than that which has just been mentioned. Ventilation should also receive a due consideration in our treatment.